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THE IMPACT OF GOAL SETTING AND
EMPOWERMENT ON GOVERNMENTAL MATRIX
ORGANIZATIONS

THESIS

Stephen R. Corey, Captain, USAF
Patricea W. Hogan, GS-12

AFIT/GLM/LAR/93S-12

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AFIT/GLM/LAR/93S-12

THE IMPACT OF GOAL SETTING AND EMPOWERMENT ON GOVERNMENTAL MATRIX ORGANIZATIONS

THESIS

Presented to the Faculty
of the School of Logistics and Acquisition Management
of the Air Force Institute of Technology
Air University

In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Logistics Management

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September 1993

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Preface

This was an interesting study for both of us to undertake. Matrix managed organizations are rapidly becoming the norm, and we felt that a better understanding of them is vital to all of our future successes. This study was extremely helpful to both of us, since we will both enter matrixed organizations upon graduation.

I would like to express our sincere appreciation to the many people who helped in this endeavor of ours. We would specifically like to recognize all those who took their time to participate in the interviews, contributing their personal data to the study. Everyone we contacted was willing and eager to help.

To Majors Wayne Stone and Michael Moribito, our sincere gratitude for advising this project. Their contributions provided us with the vision and grounding every qualitative work requires to succeed. Many Thanks!

We would also like to recognize our spouses, Teresa and Patrick, whose support, encouragement, and guidance made this task possible. (Especially Teresa for her many hours spent transcribing and entering the interview data.) All we can offer is our love and gratitude in return.

Steve Corey
Patti Hogan

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Abstract

The matrix management concept is currently in use by many DoD organizations. Theories of goal setting and empowerment seem to align with some of the responsibilities assumed by matrix project managers. The research problem was to determine whether well-functioning government matrix organizations owe their effectiveness to 1) a project-oriented matrix organizational structure, or 2) to good goal setting and/or empowerment practices by managers. Interviews were conducted at three SPOs at WPAFB and at DLA's DESC and DCSC. Qualitative analysis, including dendrograms and matrix displays was utilized. Conclusions include the following points: goal setting is not prominent, but may not be so critical in government organizations, due to establishment of functional goals during training; Empowerment is critical and was found to reduce paperwork, lower response times, and improve cooperation among functionals - in addition to established benefits of empowerment; Project matrices are perceived to be more effective by project matrices personnel. Recommendations include the following points: Team members be fully qualified and trained prior to being matrixed; project leaders be selected for their leadership qualities and openness, communication channels be established for exchange of functional information; and that new support roles be designed for functional leaders.

THE IMPACT OF GOAL SETTING AND EMPOWERMENT ON GOVERNMENTAL MATRIX ORGANIZATIONS

I. Introduction

The matrix management concept is currently in use by many Department of Defense organizations and is soon to be implemented by others. Matrix organizational structures differ not only from the traditional departmental structure, but there are also different types of matrix structures (Galbraith, 1971:34). Matrix organizations can be based on both functional, and project authoritative lines. Most successful matrix implementations have been based more within the project spectrum than the functional spectrum. (Larson and Gobeli, 1987:131)

The theories of goal setting and empowerment seem to align with some of the responsibilities assumed by the project manager in a matrix organization. The project manager is in a position to establish specific goals for the project team, and each team member has the power to decide how that goal should be accomplished. Thus, a relationship appears to exist between successful matrix implementation, proper goal setting techniques, and empowerment. However, the literature does not describe this relationship, and so we explore this connection in our research.

Specific Problem

Literature written by Larson and Gobeli states that the project-oriented matrix organizations appear to be more effective than functionally oriented matrix organizations (Larson and Gobeli, 1987:131). In a project matrix, the balance of power lies more with the project manager than the functional manager. In a functional matrix, it lies more with the functional manager. (See "Terms Defined" section for more in-depth definitions.) The research problem is to determine whether well-functioning government matrix organizations owe their effectiveness to 1) a project-oriented matrix organizational structure, or 2) to the good goal setting practices and/or to empowerment of personnel by the managers.

Investigative Questions

In order to research our specific problem, we investigated the following areas:

What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?

Do personnel in matrix organizations think their organizations are effective?

Do project managers set more specific goals than functional managers?

Does a project matrix promote more empowerment in subordinates than a functional matrix does?

To better understand matrix organizational structures, goal setting and empowerment, we will first define some terms and then provide a basic background analysis of each.

Terms Defined

Matrix Organization - A matrix organization is "a mixed organizational form in which normal hierarchy is [overlaid] by some form of lateral authority, influence or communication. In a matrix, there are usually two chains of command, one along functional lines and the other along project lines" (Larson and Gobeli, 1987:126).

Project manager - The project manager coordinates a project or product line. That person's responsibility lies in making sure the project stays on schedule and costs stay in line.

Functional manager - The functional manager has technical expertise and/or authority. That person's responsibility lies in making sure that functional requirements are met.

Functional and project/product matrix organizations are defined in terms of the roles of the two different managers.

Functional matrix organization - In a functional matrix organization, "the functional managers are responsible for the design and completion of technical requirements within

their discipline" and have direct authority over personnel. "The project manager basically acts as a staff assistant with indirect authority to expedite and monitor the project" (Larson and Gobeli, 1987:127-8).

Project or Product matrix organization (these two terms are used interchangeably) - This type of matrix "refers to a situation in which the project manager has direct authority to make decisions about personnel and work flow activities. Functional managers involvement is limited to providing services and advisory support" (Larson and Gobeli, 1987:128).

Goal Setting - The process of establishing goals. In many cases, goal setting involves a superior and subordinate working together to set the subordinate's goals for a specified period of time (Locke, 1968:189).

Empowerment - The understanding that one leader cannot manage all the problems within an organization. The underlying concept of empowerment is the delegation of authority to the lowest level of responsibility for the accomplishment of the organizational goal (Byham, 1988:99-105).

Introduction to Matrix Management

There are many methods of organizational design, which include functional departmentalization, project management structure, and matrix management, which is a combination of the first two structures. Janger defines a "matrix

organization [as] any organizational device that coordinates work across unit boundaries, or that allows peers to work together on a collegial basis." Matrix is typically used in complex businesses, where "a more conventional approach is not perceived to be adequate" (Janger, 1979:vi and 1).

Results of research by Larson and Gobeli, show that the project matrix is usually perceived to be the most effective (Larson and Gobeli, 1987:132). More detail regarding this study will be discussed in the Literature Review. In our research, we explore this aspect in some of the matrix organizations in the Department of Defense (DOD).

Matrix management theoretically holds many advantages over traditional functional management and project management. Larson and Gobeli state that advantages include the following: increased communication through the lateral channels; more efficient use of resources; and motivation and commitment through participative decision-making (Larson and Gobeli, 1987:128-130). The latter one of these advantages hints at empowerment, which is one of the areas we explore in our research. Some inherent disadvantages also theoretically often accompany matrix. Larson and Gobeli list the following as potential problems: power struggles due to the dual authority structure; excessive overhead; and difficulty in monitoring and controlling resources (Larson and Gobeli, 1987:131).

Introduction of Goal Setting

Goal setting theory suggests that individuals' fundamental bases for behavior are the goals they wish to attain, and their intentions to meet these goals. Goal setting was first given popular consideration by E. A. Locke in 1968 (Gibson, 1991:156), though the actual essence of the theory may be traced back to the birth of scientific management and Frederick W. Taylor (Steers and Porter, 1982:82). Goal setting theory holds that motivating the worker relies upon a cognitive connection between their effort toward goal achievement and the outcomes their efforts produce. In particular, Locke offers two determinants of cognitive behavior, those of values and intentions. Locke describes values as those feelings or beliefs that a person regards as conducive to one's welfare. Intentions are directive in nature; intentions guide human thoughts and their overt actions (Branden, 1966:1-9). Intentions are the guide to actions that may or may not be fully carried out. The fundamental effect of goals on the mental or physical behavior of the worker is in the direction that the worker takes in meeting those goals, or intentions. Final actions are based upon an individual's ability to complete the act; however, even aborted actions are typical of those guided by conscious goals (Steers, 1983:58).

Introduction of Empowerment

Empowerment places the responsibility for actions in the hands of the worker. The underlying concept of empowerment is the delegation of authority to the lowest level of responsibility for the accomplishment of the organizational goal (Byham, 1988:99-105). Empowerment is imperative due to the fact that no individual can affect the total requirements of the organization, no matter how highly qualified that individual may be.

The practice of empowering individuals can trace its heritage back to Moses during the Exodus. The Old Testament gives the account of Moses' empowerment of able men of Israel to teach the laws and to lead the people of their community. Moses set about selecting his cadre of able men as rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens. Moses remained the highest authority over the Israelites: in cases that could not be settled by the lower leaders, Moses was called upon to manage the settlement (Exodus 18). This is the essence of empowerment, to give to the individual at the lowest possible level the authority to manage the task within their capabilities, and to seek the advice of their superiors when they are unprepared to make decisions.

Empowerment has recently been mentioned as a segment of Management By Objectives, Quality Circles, Participative Management, and Total Quality Management.

Value of Research

As the literature search will show, there is a gap exploring relationships between clarity of goals and empowerment as they relate to matrix management. Our research is motivated by the fact that we believe specific goals and employee empowerment are the foundations of successful matrix management. If this is shown to be true, it may illustrate valuable insight to users of matrix management.

Scope/Limitations

In our study, we were not attempting to find a causative relationship, but exploring correlations between well-functioning matrix organizations and good goal setting and empowerment practices. Since our method of research required personal interviews which was time-consuming, we used a convenient sample of government matrix organizations in the local area. The personnel we interviewed are employees in all work-force levels working in matrix organizations.

Overview of the Thesis

Our research consists of interviews of matrix organization members at all levels of operation, including project managers (also known as program managers), functional managers, and personnel from several of the functions in the matrix teams. Interviewees represent three System Program Offices in Air Force Material Command,

Defense Construction Supply Center (DCSC) in Columbus, Ohio and Defense Electronics Supply Center (DESC) in Dayton, Ohio. Interview questions address their type of matrix (project or functional), how goals are set and by whom, whether or not personnel are empowered, the level of success the subjects feel the organization exhibits, and suggestions for changes that could improve the effectiveness of their matrix organization.

II. Literature Review

Overview

The investigative questions of this research attempt to determine if a relationship exists between successful matrix organizations and good goal setting and empowerment practices. This review explores literature on matrix organizations, goal setting and empowerment. The matrix organization analysis covers the background of matrix management, considers theoretical advantages and disadvantages of this type of management, explores the different types of matrix organizations, discusses the project matrix and outlines some of the reasons for the project matrix organization's success. The goal setting review discusses the tenants of goal setting theory, goal specificity, goal difficulty, and the Expectancy-Valance theory. Empowerment is discussed by establishing its definition and discussing the four elements (direction, knowledge, resources, and support) that must exist for a successfully empowered work force.

There is a gap in the literature exploring relationships between clarity of goals and empowerment as they relate to matrix management. We believe that specific goals and employee empowerment are the foundations of successful matrix management, and so we research this possible relationship in order to substantiate our beliefs.

Background of Matrix Management

A brief background of the matrix organization is outlined below in order to give the reader a better understanding of matrix organizations. After this background, the research relates the matrix organization to the factors of goal setting and empowerment.

There are many types of organizational design, with the most traditional one being the centralized functional form, where each function is a separate department (Figure 1). At

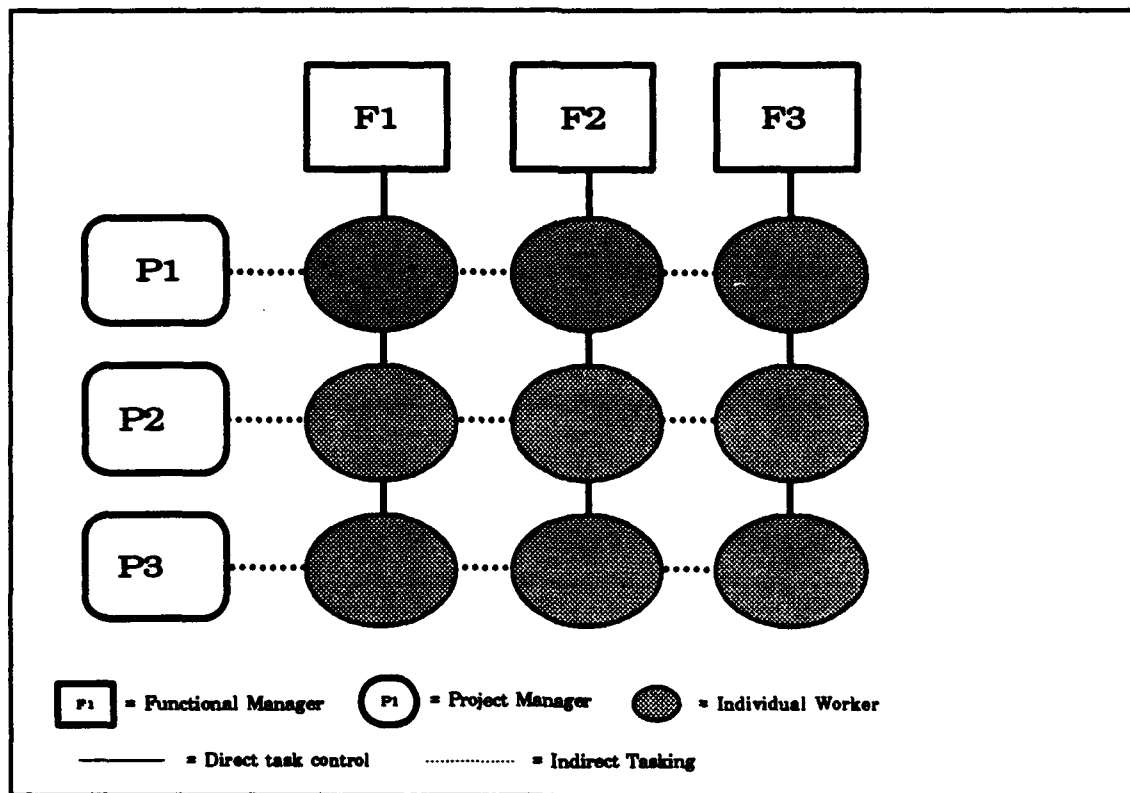


Figure 1. Functional Matrix Structure.

the opposite end of the spectrum is a decentralized product division structure, where a product or project manager

supervises a product or project team with permanently assigned personnel from different functional areas (Figure 2).

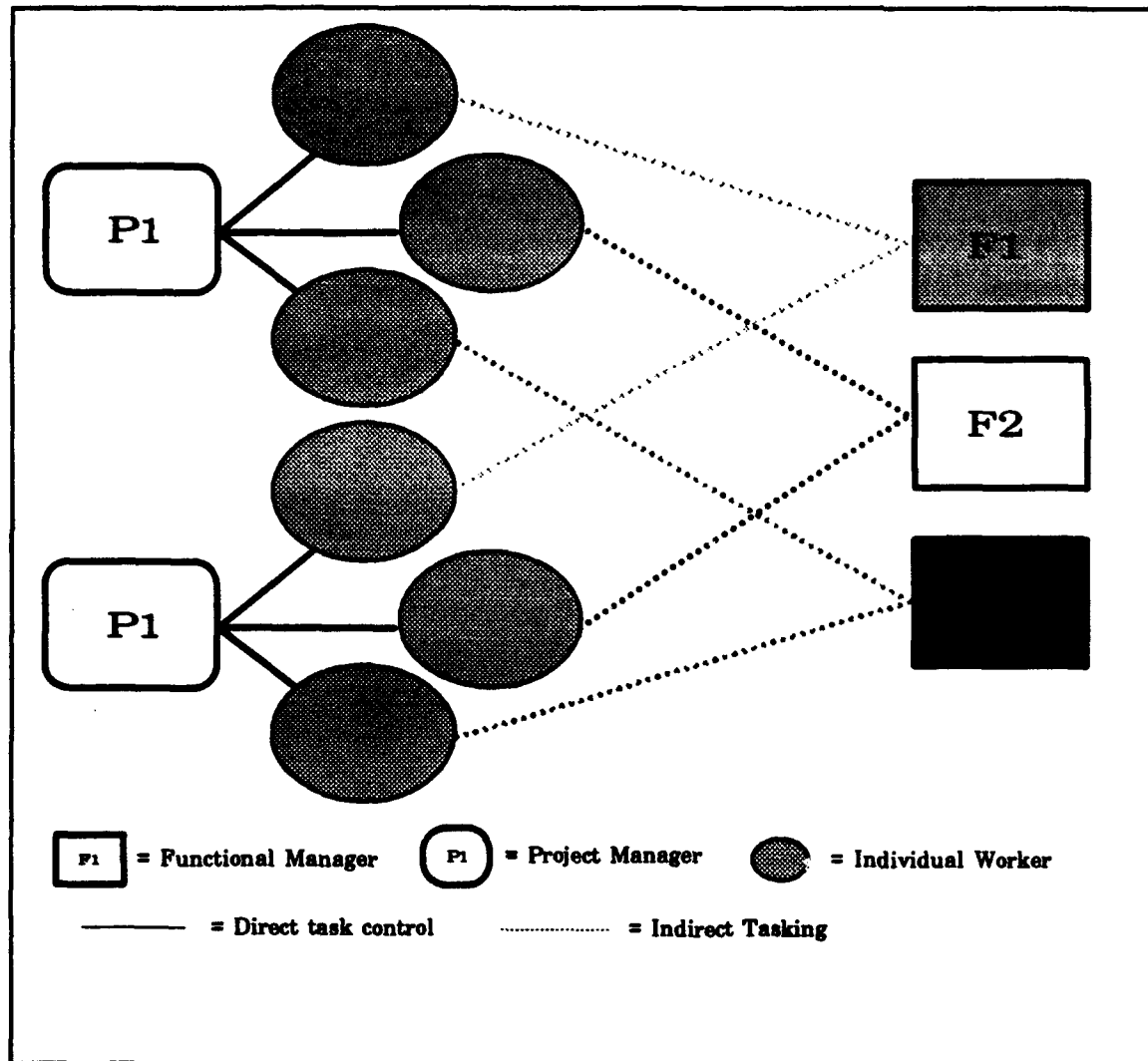


Figure 2. Project Matrix Structure.

Matrix management is a combination of these two structures and attempts to achieve the benefits of both functional and project structures (Galbraith, 1971:30-31).

Janger states

[A] matrix is built around a cooperative relationship between the [project manager], who directs the work but who does not deploy the people, and the [functional manager] who does the hiring, training, paying and terminating of the people who actually do the work, but who does not determine what work they do (Janger, 1979:2).

In a matrix, individuals from a functional department are assigned, usually on a temporary basis, to a project manager who is responsible for the completion of a task (project). Upon completion of the project, personnel return to their functional organization (Chambers, 1990:37).

Organizational managers decide to change from more traditional structures to a matrix organizational structure because, according to Stanley Davis, "it seems that when one basis of design is chosen (functional or project), the benefits of the other are surrendered." Davis states project structures "facilitate coordination among functions for rapid and efficient response, but reduce the ability to develop specialized expertise." On the other hand, he states that functional structures "maximize specialized interest, but coordination across these specializations become more difficult" (Davis, 1974:60). Thus, matrix allows an organization to realize the benefits of both structures, without having to trade-off with one of the drawbacks. According to Burns and Wholey, other reasons organizations try the matrix structure are when there is a high diversity in their organization, and also some tend to

follow when they know prestigious organizations in their network are using matrix (Burns and Wholey, 1993:130).

Jay Galbraith, one of the original proponents of matrix structures, developed a model which is illustrated in Figure 3. Regarding this model, Galbraith contends that there are a "wide range of alternatives between a pure functional organization and a project organization, with the matrix being half-way between" (Galbraith, 1971:37).

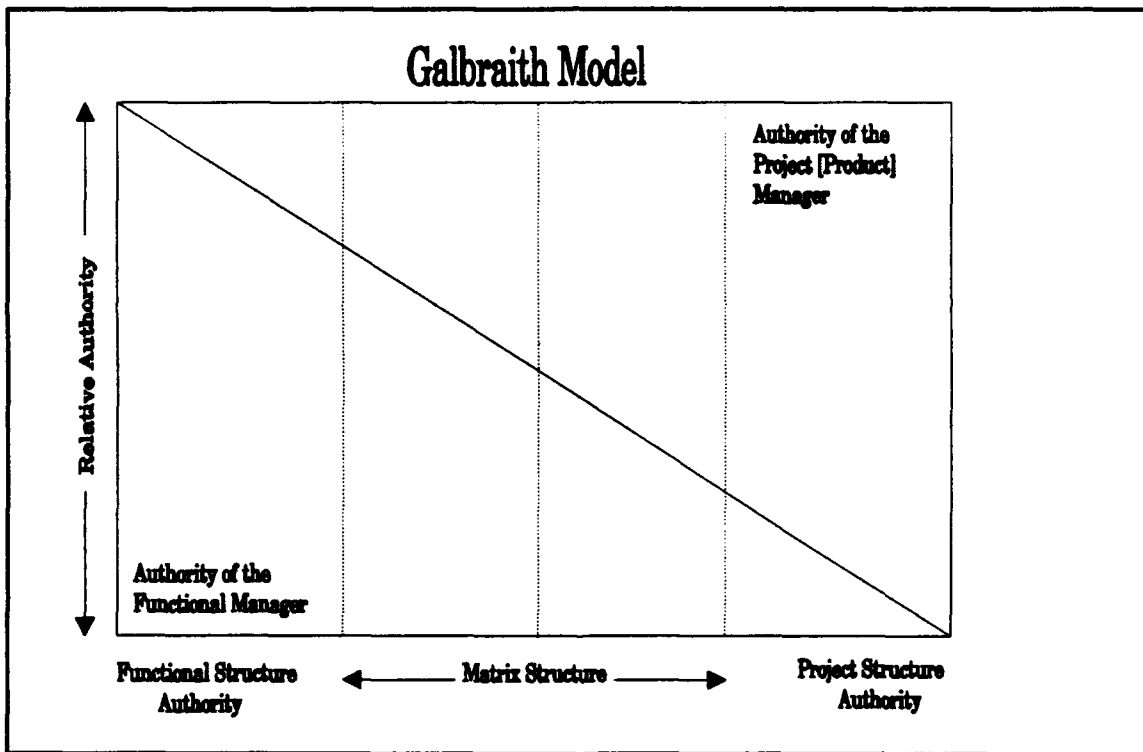


Figure 3. Galbraith Model. (Galbraith, 1971:37)

The Galbraith model illustrates the relative influence held by the functional manager and the project manager in each type structure. When the organization is purely functional, the functional manager retains the most authority and the

organizational structure lies to the far left in the model. In a project organization, the project manager maintains the most authority and the organizational structure lies to the far right. The pure matrix structure tends to straddle the center position in varying degrees, where the authority and influence are shared. In a study of matrix management, Eduardo Vasconcellos further describes various matrix structures in the Galbraith model. In a functional matrix organization, the functional manager retains more authority over human resources and the structure lies to the left of center in the model. In a project matrix, the project manager maintains more influence and the structure lies to the right of center (Vasconcellos, 1979:58).

Different Types of Matrix Organizations

Many authors have viewed matrices as three distinctive types: functional matrices, balanced matrices, and project matrices (Larson and Gobeli, 1987:127). Well-known authors in the field of matrix organizations, Davis and Lawrence assert that matrices fall on a continuum of evolutionary progression (Davis and Lawrence, 1977:37). Initially, matrices are often tried on an experimental basis, beginning with a functional matrix. A project manager acts as a staff assistant with only indirect authority to expedite and monitor the project. The functional manager retains most of the responsibility for design and completion of technical requirements. The second step in the evolutionary process

is a balanced matrix, where the project manager and the functional manager share responsibility equally. The project manager decides what needs to be done, and the functional manager decides how it can be accomplished most efficiently, using his or her technical expertise. The last step is a project matrix, where the project manager holds the most authority over resources and direction of the project. The functional manager provides technical support (Larson and Gobeli, 1987:127). These three steps fit in the continuum of Galbraith's model between functional structure and project structure. As an organization attains a higher level of comfort with matrices, it often progresses along this natural continuum (Burns, 1989:351).

The project matrix, the final step in the matrix continuum, is usually the most effective type of matrix, according to Larson and Gobeli. They state, "The project matrix is likely to enhance project integration, increase reaction time, diminish power struggles, and improve the control and monitoring of project activities and costs" (Larson and Gobeli, 1987:132). (Results of their research are related later in this chapter.) These advantages result from the authority being centralized in the project manager, who can keep tighter control over the project. Many organizations do not allow matrices to evolve into this phase because of political motivation, according to several managers in a Larson and Gobeli study. A hesitancy about sharing power may come into play, because functional

managers believe that their power is being usurped by project managers (Larson and Gobeli, 1987:128). In addition, many organizations probably do not realize that there are different types of matrices and assume the form they are using is the only one. Lawton Burns discovered that many times an organization skips steps in the evolutionary process and implements a project matrix from the beginning (Burns, 1989:366). While the project matrix may be the most effective method to accomplish implementation of matrix management, many organizations have trouble beginning with this phase. Often, the functional managers are tentative about trusting their resources to an untested program.

A study performed by Larson and Gobeli, demonstrates that many managers agree project matrices are the most effective. Data were collected in questionnaire format, with 510 respondents. Among those sampled were project managers and directors of project management programs (30%), functional managers (26%), and presidents, vice-presidents, and division managers (16%). The results are listed below:

77% said their organizations had used matrices. Of those who had used them, 89% said matrices would be used again.

78% had used project matrices

74% had used functional matrices

68% had used balanced matrices

Larson and Gobeli state "The results indicate a strong preference for the Project Matrix, which was rated above

effective. The Balanced Matrix was considered effective, while the Functional Matrix was rated below effective" (Larson and Gobeli, 1987:135). In this survey, not only did the project managers give the project matrix the top rating, but top management and functional managers also agreed project matrices are the most effective form (Larson and Gobeli, 1987:133-137).

Another expert reports that a study, known as the "Sloan School Project," determined that the most effective performances were associated with matrix structures in which a majority of the personnel were directly responsible to the project managers (Knight, 1977:110).

Advantages of Matrix Management

Matrix management theoretically holds many advantages over traditional functional management and project management.

Communication. In matrix management, there is increased communication through the lateral channels, which supplement the traditional vertical channels of communication (Joyce, 1986:536).

Lower Level Decision-Making. Matrix management forces decision-making down to lower levels in the organization, where personnel are more familiar with the technical nature of the project or product (Lehman, 1987:14).

Efficient Use of Resources. Under matrix management, resources can be used more efficiently, because technical

experts and specialized equipment can be shared by various project teams (Larson and Gobeli, 1987:128).

Discipline Retention. Larson suggests that an important advantage of matrix is "that it allows participants to sustain their link with their functional area while working on multidisciplinary projects." It also "helps participants to remain technically sharp in their discipline" (Larson and Gobeli, 1987:129).

Motivation and Commitment. Participative decision-making, which occurs in a matrix, usually coincides with increased motivation and commitment (Larson and Gobeli, 1987:130).

Disadvantages of Matrix Management

Matrix management also theoretically holds some inherent disadvantages.

Power Struggles. Conflicts between functional managers and project managers are certain to happen in matrix management. These managers often have different priorities and goals which need to be accomplished with the same set of resources. Structures that are close to the middle of Galbraith's model are likely to experience more of this conflict (Larson and Gobeli, 1987:131). Davis and Lawrence suggest that power struggles are the essence of matrix management and that friendly competition should be encouraged. However, all-out combat should be punished (Hill and White/Davis and Lawrence, 1979:139).

Reduced Reaction Time. Matrix management involves shared decision-making, and group decisions are normally more time consuming (Larson and Gobeli, 1987:132). According to Davis and Lawrence, matrix managers should not fall into the mistaken belief that matrix is the same as group decision-making. All decisions need not be made in group meetings (Hill and White/Davis and Lawrence, 1979:140).

Excessive Overhead. There is increased overhead in matrix management because there is an additional personnel in the roles of project manager (Larson and Gobeli, 1987:132). However, Worley and Teplitz state that matrix managements reduces resource requirements of functional personnel, because resources can be assigned to more than one project at a time. This conservancy of resources, however, can also lead to competition for those resources (Worley and Teplitz, 1993:31).

Difficulty in Monitoring and Controlling. Larson and Gobeli declare that "While in principle each functional area is responsible for a particular segment of the project, . . . contributions naturally overlap, making it difficult to determine accountability" (Larson and Gobeli, 1987:132).

Strategies for Matrix

Matrix management will work best if managers focus on strategies to help minimize some inherent disadvantages in this type of organizational structure.

Training. Effective training, especially team building, is a key requirement in developing successful teams (Vogt and Hunt, 1988:100). This concept is supported by another author, who indicates that highly focused training is critical. This includes cross-training in the various functional areas of expertise, so that each person will have a better understanding of the viewpoints of other team members (Hills, 1992:54).

Acknowledging Conflicts. It is best according one author, to acknowledge potentially conflicting demands from the beginning of matrix assignments, so that all personnel will realize that conflict is natural in this type of management arrangement (Dangot-Simpkin, 1991:1).

Considering Matrix Assignments. Managers should carefully evaluate personnel they are considering for assignment to matrix projects. A well-organized, effective communicator who is adept at working in teams, will make the best matrix team member (Dangot-Simpkin, 1991:1).

Maintaining Continuity. One author states that the functional supervisors need to maintain contact with their functional personnel who are in a matrix project team. This contact may help prevent them from feeling detached from their area of technical expertise (Lehman, 1987:17).

Matrix Organizational Structures in Business

Among the various businesses who have tried matrix, there are conflicting viewpoints as to whether matrix is a

good structure. Janger reports on some of these in a report of the findings of The Conference Board, an independent research institution. According to Janger, some say it is "loose, disorganized management"... that can't help but "result in a sacrifice of accountability and performance" Janger states that others say:

Matrix is anything but disorganized. On the contrary, the responsibilities, authorities, and accountabilities of managers tend to be far more fully and precisely specified in the matrix than in traditional organizations. Since so much depends on effective relationships among matrix managers, their superiors, and their subordinates, these relationships tend to be formalized and spelled out to a substantial degree (Janger, 1979:3).

Naturally, it usually takes time for an organization to attain these types of effective relationships. Bartlett and Goshal state that Matrix can take months and often years to evolve into effective knowledge generating and decision-making relationships. They suggest that focus be on "developing the abilities and performance of individual managers... and creating a matrix in the minds of ... managers". Top managers need to counter the insular attitudes that seem to have proliferated in managers of companies that are increasing in complexity, who seem to only know their own functional area. The way to accomplish this is to "develop and communicate a clear sense of corporate purpose (Bartlett and Goshal, 1990:140 - 145).

Goal Setting

Goal setting theory is a subset of cognitive theories of motivation. Cognitive theories express the belief that people are capable of reasoning out the consequences of their actions. Cognitive theorists attempt to develop models where the thoughts of an individual can be traced from the point of *intention to perform* until the *action takes place in the work center*. Expectancy theory states that motivation is based upon a cognitive connection by the worker between the efforts they put forth, and the benefits they will receive by accomplishing these goals. We can best view the relation of goal setting theory and the cognitive basis, represented by the path lines, by comparing their models in Figure 4. Latham and Locke's findings established that the higher the intended level of achievement among the workers involved, the higher the level of performance attained (Latham and Locke 1979:194-196).

One major addition to goal setting theory involves the level of satisfaction or dissatisfaction one would expect upon reaching the desired performance level. Satisfaction, as a function of a cognitive perception, relies upon the expected outcome of the actions of the value of the outcome to the performer. The Expectancy-Valance theory, as presented by Hulin and Smith, further guides the manager in presenting goals, and in the level of effort to expect from the worker in reaching those goals (Hulin and Smith 1965:49).

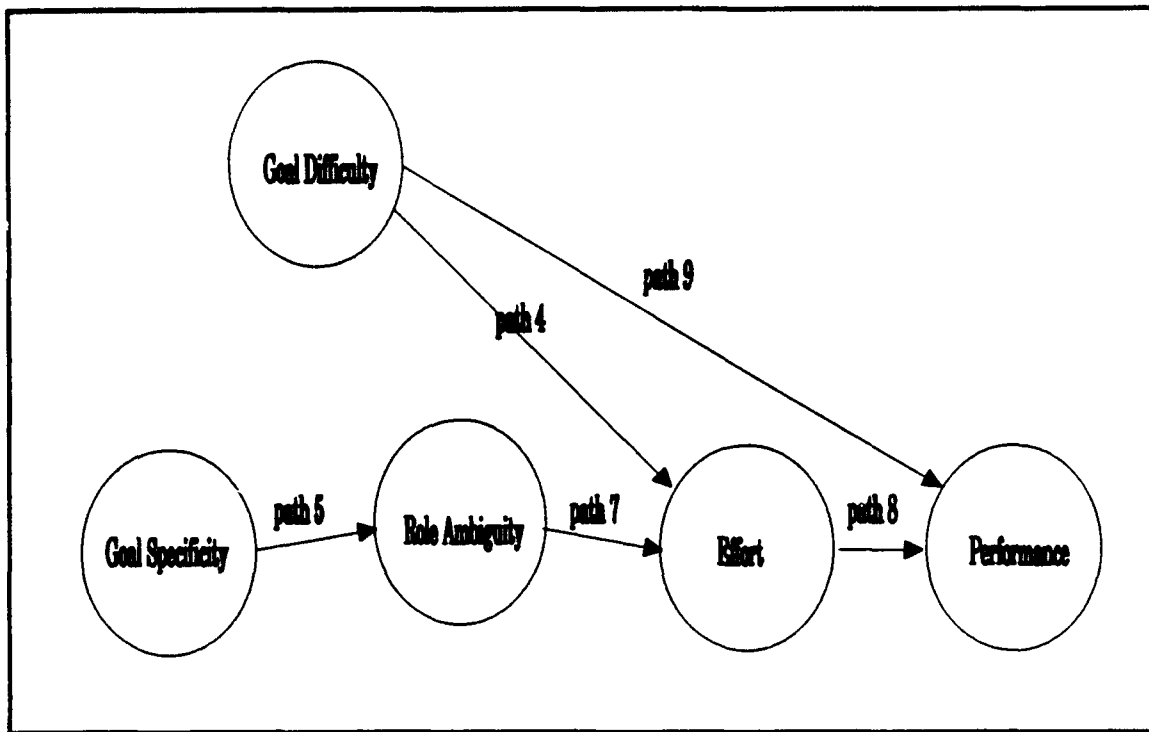


Figure 4. Goal Setting Model. (Rasch and Tosi, 1992:398)

A second addition to the goal setting theory involves the participation of the worker in setting the goals of intended achievement. It is believed that participative goal setting promotes the acceptance of the desired goal by the worker, and in turn gains greater commitment toward the achievement of that goal.

Goal setting theory places its emphasis upon two determinants for a worker's performance: conscious goals, and the intentions to fulfill these goals. The idea of behavioral intentions and conscious goals are used to support the theory that the harder a conscious goal is, the more effort of performance the worker would spend to achieve those goals (Steers and Porter, 1983:58). We must also understand that the presentation of a goal does not

necessarily equate to high performance. Increased performance is based upon the acceptance of the goal by the one expected to expend the efforts to meet the goal (Steers and Porter, 1983:58-59).

Two attributes Locke presented as fundamental to the establishment of goal setting in an organization are goal specificity, and goal difficulty. Many studies have established that the more difficult the goal is to achieve, as long as it is accepted by the worker, the higher the performance level that would be expended toward that goal's attainment (Locke, 1978:159; Mento, Steele, Karren, 1987:53).

Goal Specificity. Goal specificity is the extent of clarity that has been assigned to the goal as it is understood by the worker. "Goal specificity is a quantitative measurement that clearly describes what is needed to be accomplished to meet the goal" (Rasch and Tosi, 1992:403).

Goal Difficulty. Goal difficulty is the emphasis upon which we could place performance emphasis. Locke, in his original study, found that even in cases where goals were set so high that the worker seldom could reach them, their performance was higher than others that had goals which were easily attained. (Locke, 1968:178) For example, if the goal is set at 10 boxes moved per day, when the average performance is 10 boxes, the worker would feel as if he is finished after moving all 10. If the goal were set at 13

boxes per day, the worker should feel compelled to attempt the level of 13 boxes. Goal specificity is the second key to this enhanced performance. In our example, the difference between 10 and 13 is an idea that is easily understood by both the worker and the manager. If the higher goal were set at "increasing productivity by 33 percent," this may mean differing levels of production by each individual.

The goal difficulty-to-performance relationship, must be tempered by other characteristics: the self-perceived ability of the individual to meet the established goal and the reward the individual expects upon reaching that goal. These characteristics have been generally described as *goal commitment*, or the amount of actual effort the worker will put forth toward meeting a goal (Gibson, Ivancevich and Donnelly, 1991:157). Taking the previous example, if the goal were set at 13 boxes per day even though the workers have been unable to reach the 10 per day level, the likelihood of the goal to be accepted by the individual is nonexistent. Likewise, if the goal were increased to 13 boxes, but the level of reward remained equal to that established for the output of 10, it is unlikely that the individual would commit to exceeding the new goal level (Locke, 1968:180).

Expectancy-Valance. Vroom's Expectancy-Valance theory brings this balance of goal-to-reward into a better relationship when discussing performance efforts (Landry and

Trumbo, 1980:73). "Expectancy theory emphasizes the cognitive aspects of motivation" (Rasch and Tosi, 1992:402). Expectancy defines the worker's assessment that they are capable of performing at the level which will be rewarded. Three major factors affect the level of performance by the individual. First, the effort may be tempered by the ambiguity of the goal as defined by the manager. Secondly, the skills possessed by the worker may not allow the worker to attain the level of performance. Finally, the Valance, which represents the value of the reward to the individual worker, affects performance. If the effort is not sufficiently rewarded in the worker's judgement, the greater level of effort to attain the goal will not be expended.

Instrumentality of the reward is a key criteria of Valance. Instrumentality is the usefulness of the reward to the worker. To illustrate, workers are actually rewarded in currency for their efforts. Currency is actually just dirty bits of paper, or worse yet, they receive a check representing currency. The *instrumentality* represented by money or check is its ability to purchase the rewards that the worker actually desires.

Empowerment

Empowerment has become a component of many recent management programs. Total Quality Management (TQM), teamwork, and participative management all accept empowerment of the worker as a key tenant of management.

There has been one misconception: that to empower the worker is to take power away from the manager. Empowerment bestows decision-making authority in the worker for actions that concern their tasks (Gandz, 1990:75). With the transfer of decision making to the workers a number of actions must take place. Managers, realizing that each individual may possess skills and abilities which make them particularly well-suited for specific tasks, release authority to accomplish that task to the best qualified individuals. In doing this the manager and the organization rise to a new height, greater than if the manager tightly held onto the responsibility alone. By giving the responsibility for certain tasks to the worker who is most qualified, the individual worker is able to apply their unique qualifications to the greater good of the organization. Henri Fayol believed that allowing the individual to exercise their skills to the greater good of the organization promotes self-esteem and initiative in the workers. The initiative of the work force combined with the manager's, represents a great source of organizational strength. Individual allowed to exercise their initiative are "infinitely superior to [those] who cannot do so" (Fayol, 1978:64-66).

Empowerment places responsibility and trust in the person who is most capable of recognizing an opportunity for change and most able to make the change needed. That person is the worker most closely associated with the task (Byham

and Cox, 1988:36-47). However, empowering the worker does not relieve the responsibility from the manager. The manager remains responsible for knowing what is going on, setting the direction to follow, making decisions that the worker is incapable of making, ensuring people continue to work toward the goal through guidance, assessing performance, and in making the right decisions with respect to the overall organization. Four key elements presented in Zapp! The Lightning of Empowerment are:

- Direction* - key result areas, goals, measurements
- Knowledge* - skills, training, information, goals
- Resources* - tools, materials, facilities, money
- Support* - approval, coaching, feedback, encouragement

(Byham and Cox, 1988:134)

Direction. Empowering may be considered as sharing responsibility with the work force. Using Direction, the manager guides the actions of the newly empowered worker to use their efforts to the betterment of the entire organization. This transition from traditional to empowered workers requires that the entire organization shares their values and goals throughout all organizational levels.

Additionally, while the manager must continue to exercise control over the direction of the operation, the manager is expecting the workers to increase their contribution to the organization. To maintain the workers efforts, establishing a reward system that recognizes their

efforts is required. When empowered employees take on more responsibility, or bring other benefits to the organization, the benefits should be shared (Gandz, 1990:76).

Knowledge. Empowered workers, especially conscientious ones, will not initiate actions if they properly understand the effect that their decisions will have. To make good decisions, the worker must understand the interactions and ramifications of that decision on their work place as well as the entire organization. Additionally, the worker must be taught how to make those decisions with competence, and with the belief that the actions they take will be successful. Knowledge of their position, and the other positions around them, give the empowered worker the feeling of understanding, competence, and control that allows them to make contributions (Stone, 1992:8).

Resources. Knowledge alone will not institutionalize action, the worker must also have the resources needed to facilitate the decisions they make. Few changes will be completely free of implementation costs. The organization must provide the tools, materials, facilities, time, and money needed to make the proper decisions. Without the support of the organization, the decisions made by the workforce will not succeed (Byham and Cox, 1988:52-54).

Support. The manager must act as a coach to the workers. Every proposal by the worker must be met with encouragement, approval, reinforcement, and recognition. Managers must exhibit their trust in the worker's decisions,

and each proposed change must be given a chance to be proven as beneficial. Encouraging feedback must be provided, so that every worker feels their decisions contribute to the overall performance of the organization (Eisman, 1991:140; 218).

Benefits of Empowerment. Empowerment provides clear direction for all members of an organization, and lets everyone know that their contributions are important to the wellness of their organization. It establishes responsibility and trust among the workers, and when implemented correctly establishes direct lines of communication both upward and downward. When workers are empowered, they have control over their work and take responsibility for their actions. Workers who feel responsible for themselves and are recognized for their contributions, are more productive and will perform at a higher standard (Byham and Cox, 1988:121-125).

Summary

There is a gap in the literature exploring relationships between clarity of goals and empowerment as they relate to matrix. Empowerment is delineated as an advantage of matrix management by David Lehman, although he doesn't refer to it as "empowerment". Lehman asserts that matrix management forces decision-making down to lower levels in the organization, where personnel are more familiar with the technical nature of the project or product (Lehman,

1987:14). One of the advantages of Matrix management is that personnel are responsible for the actions undertaken by their team, effectively empowering them as workers. We believe that specific goals and employee empowerment are the foundations of successful matrix management and we explore that relationship in the research that follows.

III. Research Methodology

Chapter Overview

The objective of our study was to determine if a relationship exists between the established matrix organizations and their utilization of proper goal setting techniques and empowerment practices. In order to answer the research questions posed in Chapter 1 we conducted a survey of personnel within DoD matrix organizations. Data analysis was accomplished by using two qualitative techniques known as the Dendrogram Method and Matrix Displays, to examine the relationships as they exist in matrix organizations. These analysis methods are discussed in detail later in this chapter.

Determination of Data Collection Method

The nature of our interest in the matrix management area rapidly reduced the potential methodologies that we could use for our study. We chose to investigate relationships that exist in a matrix organization, and how the values carried by the people affect the success of the organization. Therefore, we determined that our investigation must be qualitative rather than quantitative.

Research Questions

In our specific problem, we investigated the following areas:

What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?

Do personnel in matrix organizations think their organization is effective? (Correlate their answers with the type matrix they have - project or functional.)

Do project managers set more specific goals than functional managers?

Does a project matrix promote more empowerment in subordinates than a functional matrix does?

Certain portions of our research could be answered using questionnaires evaluating the organizational environment, or by researching past performances on the traditional basis of cost, schedule and performance. However, these would not bring us to our desired conclusions. Our research method logically followed our desires toward the investigation of values. To gain this type of understanding, we felt the only way to obtain this information was to talk to the managers and workers who are directly involved in day-to-day operations under the matrix organizational structure.

Data Collection

With this understanding of the type of information needed, we realized the need for an unrestricted type of data collection. This led to the evaluation of two separate

methods of information collection, either through a written survey or through personal interviews.

A written survey was considered, but upon further review, was rejected. Our concerns were based upon our need for value-based understanding. To gain this type of information the format would have been too lengthy, risking a refusal to cooperate. In addition, the understanding of value-based questions may not always be completely clear, further risking the quality of information received.

Since we settled upon a qualitative study, we felt the personal interviews would provide better quality data for our analysis. The most effective way to obtain rich detail and in-depth explanations was through personal interviews. The interaction between respondent and investigator led to a detailed understanding of the investigative questions, providing a depth to the data that we would not have obtained in any other way than through interviews. Our presence during the interview, provided the opportunity for clarification by the interviewee, and allowed us to follow unexpected trails that pertained to the answers we were given. Personal contact may also be credited with increased cooperation from the respondents (Emory and Cooper, 1991:338).

Data Analysis

Some possible difficulties to be considered during the evaluation of interview-based data were the injection of

interviewer bias, and the extensive length of the responses to be evaluated (Emory and Cooper, 1991:329). When using interview data, sometimes the value-based judgements of interviewers extend into the conversations. The injection of interviewer bias is a situation that we tried to control by reviewing our own understanding of our informational needs. Our selection of the dendrogram method also required our true understanding of the respondents' answers. The question of volume also lent itself to our selection of the dendrogram method of qualitative data analysis, in which we deliberately confined the response volume to significant and meaningful phrases in the process of our analysis (Miles and Huberman, 1989:219).

Population

In qualitative analysis, the data collected takes on the form of words rather than numbers. The data are gathered through interviews of personnel involved in matrix organizations in DOD. The interviews include a set of questions designed to elicit free-form responses. The purpose of an unstructured interview is to encouraged the interviewees to discuss the values they have about their work environment, and work attitudes. According to Emory and Cooper, in an interview, "the researcher guides the topical direction and coverage" and uses "a set of questions (that) promotes discussion and elaboration by the respondent" (Emory and Cooper, 1991:352). "The greatest

value lies in the depth and detail of information that can be secured" through the use of probing with questions that clarify and supplement the answers (320).

Other problems related to personal interviews also must be considered. Personal interviews are known to be monetarily costly, as well as costly in terms of time consumption (Emory and Cooper, 1991:329, 339). Due to the severe limitations we experienced from both of these cost standpoints, it was clearly impossible to obligate the resources we wished to, by interviewing a large sample of personnel in our research. Therefore, we consciously limited our interview subjects to those from the local area. The selection method used in this research was a form of purposive sampling using judgement criteria. Purposive sampling is a non-probability, criterion-based form of sample selection. In using judgement-based criterion sampling, we selected the sample to conform to the criteria of belonging to a Department of Defense (DOD) matrix organization (Emory and Cooper, 1991:275). The sample of interviewees included five organizational matrix staff groups, and within each, the top level managers, the matrix staff leaders, and the workers from the matrix teams.

Our sample was further restricted to the interviews of personnel at three of Wright Patterson Air Force Bases' Airframe Development Center Special Program Offices (SPO), and two of the test programs within the Defense Logistics Agency (DLA), including Defense Construction Supply Center

(DCSC) in Columbus, Ohio and Defense Electronics Supply Center (DESC) in Dayton, Ohio. Since our judgements were to be based on the values of all levels of the work force, we interviewed personnel from the upper, and immediate managerial levels and working personnel from each of the functional areas.

Variable Identification

Our interest lies in the interrelationships discovered between the independent variables, goal setting and empowerment, as moderated by the organization's matrix structure. The organization was evaluated by the perception of satisfaction with the particular organizational structure (Figure 5). The moderating variable organizational structure as either a functional- or project- centered matrix was evaluated based upon the relative control of the project manager. The independent variables were work force empowerment and goal setting practices. The dependant variable was evaluated as the level of satisfaction by the workers of the organization.

Survey Instrument

The survey instrument was designed to obtain different kinds of information. Certain questions were designed to investigate the amount of empowerment given and the specificity of goals set in the interviewee's work environment. Other portions of the interview questionnaire were geared toward obtaining information regarding each

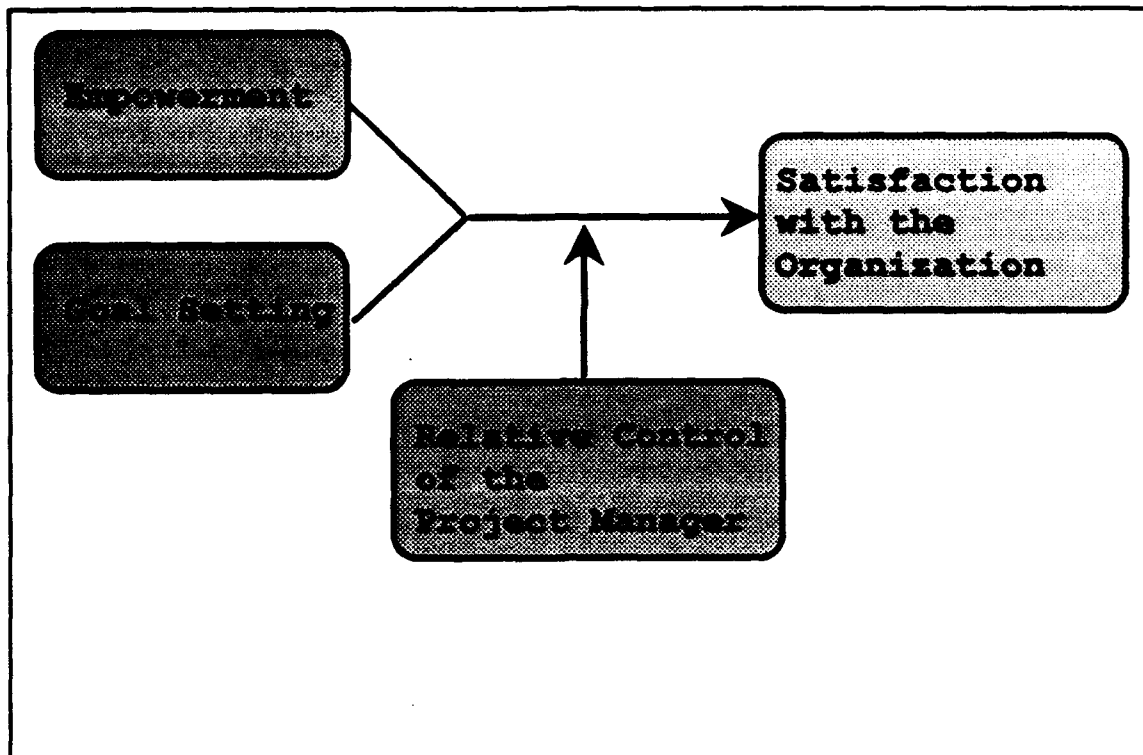


Figure 5. Proposed Model Relating Goal Setting and Empowerment as Modified by Matrix Structure.

interviewee's specific matrix environment. Questions are presented below and in Appendix A.

Interview Questions

Each of the questions that are typed in bold were asked of the interviewees and the questions that are listed below the bolded questions were asked as needed to help guide the interviewee in covering all the necessary points.

From your experience in a matrix organization, please answer the questions that follow.

- 1) (for the purpose of Matrix Structure) **What do you see as the responsibilities of each of the managers (functional and**

**project) in you office? If the interviewee is a manager:
What are your responsibilities and what are those of the
other managers?**

Are there two different managers who are
responsible for various tasks or functions? What
does each one do?

Who assign daily tasks?/ Who is responsible for
performance evaluations?

Who has control over resources?

Who has control over the design of technical
requirements?

**2) (for the purpose of Goal Setting) Who determines the day-
to-day activities of the project?**

Who assigns your daily task?

What work do you do on a day-to-day basis?

**3) (for the purpose of establishing Empowerment) What
latitude are you given in decision-making? If the
interviewee is a manager: What latitude are your
subordinates given in decision-making?**

How do you employ groups to make decisions?

How are committees established, and what are their
responsibilities for investigating problems and
making decisions, or offering recommendations
regarding the problems?

How are decisions made by the managers (either functional or project)?

4) (for the purpose of establishing goodness of the employed organizational structure) **What is your perception of the level of satisfaction in you organization?**

How effective/efficient do you think the matrix structure is?

Do you think your peers feel the same way you do?

Do you think you superiors (subordinates) feel the same way you do?

5) (for the purpose of establishing goodness of the employed organizational structure) **What is your impression of the organizational structure and its level of effectiveness?**

6) (for the purpose of establishing goodness of the employed organizational structure) **What changes do you think could improve the effectiveness of the matrix organization?**

In order to validate the survey instrument, the entire set of interview questions was reviewed by a panel of experts (Air Force Institute of Technology (AFIT) professors).

All portions of the interviews were audio tape recorded in order to preserve the answers and thus diminish the potential for interviewer error and bias. Each interviewee was appraised of the fact that the interview was being

recorded. The taped interviews have been transcribed, with names of personnel and names of organizations deleted, and appear in Appendix B.

Data Reduction

Two qualitative analysis techniques, Matrix Displays and Dendrograms, were used in combination to analyze our collected data. These methods were successfully used in combination to analyze qualitative data by Cowser (Cowser, 1991). Miles and Huberman describe matrices as "master charts (that assemble) descriptive data from each of several sites in a standard format" (Miles and Huberman, 1984:152). The Dendrogram method of data analysis is used to establish a common qualitative linking between subject responses. It is a method that combines adjective/noun groups into successively higher order groupings until a binomial set emerges (Figure 6).

Matrix Displays. "There are an infinite number of ways to set up a matrix [display]; therefore, one should invent a format that will serve best" (Miles Huberman, 1984:211). The analysis in this research paper began with a site-by-attribute matrix, in which sites are listed as rows and attributes as columns (Figure 7). The rows are also broken down by interviewee and the specific column titles relate to our investigative questions. The data was transferred from the transcripts to the matrix, by anonymous respondent identification and placed under the appropriate column.

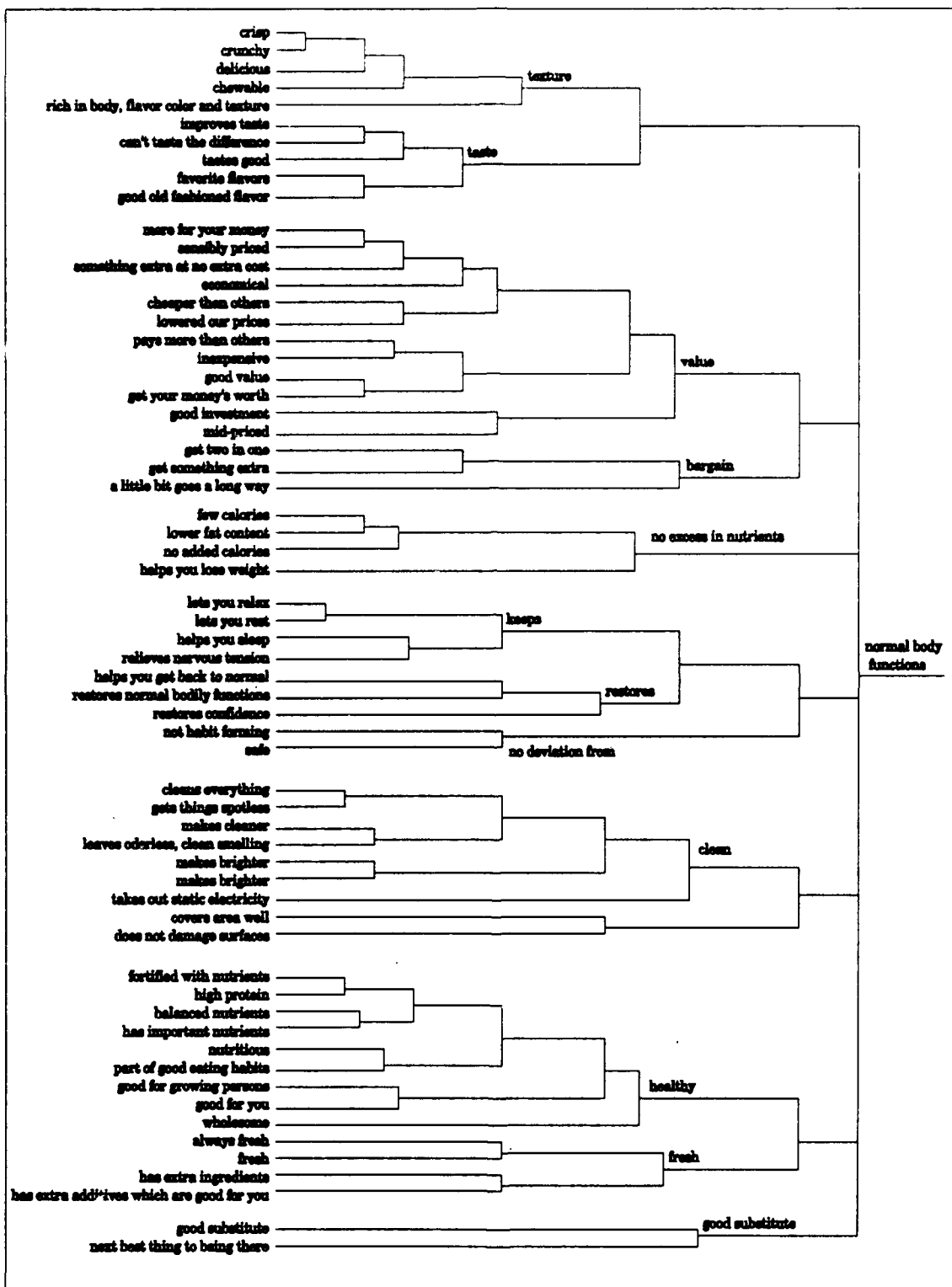


Figure 6. Dendrogram Method of Clustering.
(Miles and Huberman 1984: 220)

Users	Fellings/Concerns	Understanding How it Looked	Parts Ready/ Parts Not Ready	What Doing/ Spending Time On
R. Quint	Same as earlier-"not settling down"	Basic format clear Only 1-2 parts very clear, but appear arbitrarily put together	+ "Survival cycle" in place - Errors in materials	Getting minimally through cycle; creating, borrowing materials
F. Morelly	"More comfortable - can do the minimum" Can't do it as prescribed, will have to make changes Low retention? going through skills too quickly	"Saw major features" - "Looked disconnected"	+ "Basic things in place..not even looking at anything else"	Consolidating skills, practice time (not trying to add comprehension skills) Beginning to add grammar, worksheets
L. Brent	"Some kids wasting time" Exhaustion Insecure and afraid Boredom: "every day the same thing" Doing too little of the program	Focusing on 2-3 components, even these not clear Aware that "more in it than I thought"	+ Pieces of each component ready - Aware of not doing many key parts	Perfecting the basic cycle Trying to control actual mastery levels Trying to put together a group of core materials -misplacing, forgetting, not finding

Figure 7. Matrix Display Method of Data Reduction.
(Miles and Huberman, 1984: 82)

Ideas of respondents were reduced to summarizing phrases or short quotes that relayed those ideas (Miles and Huberman, 1984:211-219).

Dendrograms. The next part of data analysis consisted of a further refinement of the data through clustering into Dendrograms. According to Miles and Huberman, clustering may be defined as follows:

Clustering is a tactic that can be applied at many levels to qualitative data: at the level of events of acts, of individual actors, of processes, of setting/locales, of sites as wholes. In all instances, we are trying to understand a phenomenon better by grouping, then conceptualizing objects that have similar patterns or characteristics. (219)

A Dendrogram is a content-analytic display for representing clusters, which links subject responses together by combining adjective/noun groups into successively higher order groupings. The value of a Dendrogram tends to emerge when binomial set are reached, as illustrated in Figure 6. Both the matrix display and the Dendrogram serve to draw and verify conclusions from the data. They help answer a critical issue which is raised by Miles and Huberman: "whether the meanings found in qualitative data (are) valid (and) repeatable. (These) are tactics for testing or confirming meanings, avoiding bias and assuring the quality of conclusions" (215).

Limitations

The number of limitations in this study are significant. According to Emory and Cooper, the interview

process has some inherent problems, including interviewer bias and interviewer error (Emory and Cooper, 1991:327-329). The research design in this study counteracted part of the problem by using audio tapes and transcribed interviews. Time was a limitation that was dealt with by limiting the number of sites to be visited and thus the number of interviews; however, this contributed to the fact that the relationships we found may not be generalizable across all DoD activities which exist as matrix organizations.

IV. Analysis

Chapter Overview

The purpose of our thesis, which was established in Chapter I, was to evaluate and draw inferences between successful matrix organizations, and their use of goal setting and empowerment practices. To establish what constituted "good" goal setting and empowerment practices, a literature search was presented for each. This also provided a basis from which we could evaluate the organizations on their practices of goal setting and empowerment. Likewise, differing matrix structures may have an influence upon the organization's level of effectiveness, given similar levels of empowerment and goal setting. Again, a literature search was conducted, which defined identification of the structures which were used for this study. Combining the methodologies for gathering and analyzing the data, which were established in Chapter III, we were able to determine answers to each of the investigative questions. These are as follows:

What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?

Do personnel in matrix organizations think their organization is effective?

Do project managers set more specific goals than functional managers?

Does a project matrix promote more empowerment in subordinates than a functional matrix does?

The specific procedures which were followed in collection of the data were described in Chapter III.

Data Collection and Limitations

Initial contacts were made by telephone to schedule interviews for each site visited (Wright Patterson AFB's F22 SPO, Training SPO, and B2 SPO; DESC and DCSC) and appointments were set with each individual based upon their assignment to a matrix structured office. We conducted seventeen interviews which included both functional and project matrix members, team leaders, and directorate level managers from both the project and functional orientations. The functions included contracting, logistics, supply, engineering, and technical areas. Each individual organization was unique: some organizations displayed classic functional matrix characteristics, while others were purely project-oriented.

Few problems were encountered during the interviews. We found that different terminology was used in describing matrix organizations in various DoD sites. "Integrated Project Team" (IPT) is the current buzzword for matrix oriented organizational structures in the Air Force. In

DLA, Commodity Business Unit (CBU) is the common reference to matrix structures. The word "matrix" was often used as a verb describing the assignment of personnel from the functional organization to the various programs or projects. For the purposes of our interviews, "team" or "teams" were substituted for IPT, CBU and "matrix", in order to preserve the anonymity of the interviewees and their locations.

The interview questions were designed to solicit the full and rich responses that one can expect through in-depth interviews. In order for the reader to gain more insight into the difficulties of managing matrix organizations, we suggest taking the time to read the individual interviews. We found that our data tended to present more questions than answers. Follow-on research questions will be presented in Chapter V in the hopes that another team will research them for further clarification on this topic.

While the questions were constructed to gain in-depth responses, sometimes a question would not produce such a response. When a particular question was not answered to our satisfaction, we asked the question again using terms more common to the interviewee's organization to gain the richness desired. When transcribing the interviews, every attempt was made to locate those responses under their appropriate numerical identification.

Data Analysis

In the Data Analysis section we developed the matrix displays and dendrograms and used them as analytical tools. Patterns and themes emerged from the data, which supported our effort to seek meaning from the information obtained.

Matrix Development. According to Miles and Huberman, developing a matrix display is intended to be an iterative, flexible process that is adapted by users to meet their own needs and desires (Miles and Huberman, 1984:211-213). Three matrix displays were developed to answer the different groups of initial questions. One matrix display was developed for each of the three levels of the interviewees and the type of matrix structure (functional or project based matrix). Tables 1 and 2 depict the views of team members, Tables 3 and 4 of team leaders, and Tables 5 and 6 views from the directorate level managers. Each matrix display depicts sections for goal setting, empowerment and matrix effectiveness. The process of constructing the matrix displays was as much analytical value as the final product. While each of the matrix displays are presented on the following pages, each was constructed as a step in the development of the dendrograms and as such, the discussion of the results will be presented in "Findings".

Table 1

Members/Project Matrix

Issues Subjects	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
1.	<p>+team Leader</p> <p>+He relies on us to tell him what it is we're to do ... He can't be an expert in all the different areas</p> <p>+person that makes the decision is not familiar with the day to day work</p>	<p>+I'm given a lot of latitude, due to my team leader.</p> <p>+the team pretty much calls on our own expertise</p> <p>+every decision must go through the functional chain</p>	<p>+each team is different because of different team leaders.</p> <p>+I think there are a lot of problems in some areas</p> <p>+depends a lot on the team leader, some teams are really frustrated for a while</p>	<p>+frustrating for Functional leaders</p> <p>+communication is a lot better between the functionals and the project</p> <p>+functional Performance has suffered ... we're now isolated in different areas</p>
2.	<p>+what we have are two leaders</p> <p>+we are orphans here</p> <p>+kind of floating around as a consultant/advisor in their own sense</p> <p>+comes from whomever drops it in our box</p>	<p>+I'm the only one, I'm the ultimate "coin tosser"</p> <p>+the buyer has the ultimate say; any buyer stupid enough to go against the recommendations is just asking for trouble and they know it [sic]</p> <p>+wide latitude because we're not in a formal chain</p>	<p>+it's an US versus THEM situation</p>	<p>+some were deliberate to try and make us fail, others have cooperated tremendously</p>

Table 1 (cont'd)

Members/Project Matrix

Issues subjects	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
3.	<p>+the loyalties are pretty split</p> <p>+as far as I know, requirements are not the teams' function</p> <p>+I get tasking from both [the functional and project managers]</p> <p>+have 2 people coming to me for input; duplicate work where answers may be entirely different</p>	<p>+I think a lot in this area</p> <p>+sometimes he'll ask for input, and even adopt it</p> <p>+in the teams the decisions are made by the team leader, functionally more by the group</p>	<p>+I sit with the project team; that can be a problem. I can't possibly know it all</p> <p>+low in relation to the teaming concept</p>	<p>+functional supervisors less</p> <p>+project leaders ... "greatest thing since sliced bread"</p>
4.	<p>+Program Manager's needs were not Logistics, his needs were immediate, so he took the logistics manager and got him working [other things] leaving logistics left to be done</p> <p>+the team leader tells them what they are supposed to do</p>	<p>+it depends on how much the team leader wants to control the process</p> <p>+the core teams are on their own</p>	<p>+I got to tell you for an absolute fact that most of the functional people, 90% or more don't like the team concept [sic]</p>	

Table 1 (cont'd)

Members/Project Matrix				
Issues subjects	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
5.	+because the project team leader does not have the supply expertise, we, the supply people, have to talk to the functional people	+I can basically do what I feel is best +the only thing the functionals would know about is if I for some reason brought it to their attention	+satisfied, it's a great concept, and it really works +there's more to do than we can get done every day +other teams may not feel the same, it depends on the team leader's personality	+I believe they think it's effective too. They're satisfied with the performance
6.	+I don't see real team leadership +with three directorates involved ... you're going to have more holding back	+I make all the decisions within functional guide-lines		
7.	+assigned by my functional leader based upon workload leveling	+most of the decisions stand	+more efficient ... makes my job a lot easier	

Table 2

Members/Functional Matrix

issues subjects	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
8.	<p>+team leader assigns all</p> <p>+he did his thing without any direct supervision of me</p> <p>+we have guys above us who don't know what they're doing</p>	<p>+we have to be empowered, because we have guys above us who don't know what they're doing</p> <p>+they have told me to change this or that, but as long as you go by the books there can be no problem</p>	<p>+satisfaction? none with the managers we have here</p> <p>+nobody works together, except within our team</p> <p>+others have no satisfaction with the teams</p>	<p>+they just don't care anymore</p>
9.	<p>+I have only one boss and that happens to be my functional boss</p> <p>+you can get an idea from meetings of what's coming up, what needs to be done</p> <p>+the contracting people kind of take care of whatever needs to be done</p>	<p>+I can say the way I think, but I will have to discuss it with the contracting officer ... he's the one with the final say</p> <p>+you've discussed it and then you present your recommendation</p> <p>+great support</p>		

Table 2 (cont'd)

Members/Functional Matrix

<div> <div>issues</div> <div>subjects</div> </div>	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
10.	<p>+the functional is still tasking us directly sometimes with logistics tasks and that's not the way it's supposed to be</p> <p>+they come from both the project and functional directions</p>	<p>+you're the lead only to a point when the group leader approves what you're doing</p> <p>+the functional has said "you're not going to do that" ... threaten to conform based on performance evaluations</p> <p>+I have to say "Mother May I"</p>	<p>+before [matrix], everything was working well</p> <p>+Functional Managers don't have enough to do</p> <p>+working so closely with people, they learn each other's perspectives</p>	<p>+not working in a vacuum</p> <p>+duplication of efforts</p> <p>+functionals feel they're being left out</p>

Table 3

Team Leaders/Project Matrix

Issues Subjects	Goal Setting	Empowerment	Matrix	
			Self/Peers	Supervisors
11.	+I tell myself I suppose +I do question them on a lot of the things they're doing	+It's not been defined here because we're so unique +we go with what the team wants +she's my boss and can do whatever she wants +she usually overrides the team	+too much for them to handle, they're now dissatisfied +I don't think team leader is something any person could do well ... too much work +don't think they're happy campers	+there's not a lot of communication. they don't tell us
12.	+driven more by workloading. we do the items that come through to us	+they make good decisions. have had a lot of training	+conceptually, it's the best way to go +more like an uncomfortable feeling +their group decisions are the key to making this concept work	+they don't know fully what they're suppose to be doing

Table 3 (cont'd)

Team Leaders/Project Matrix

<div> <div>issues</div> <div>subjects</div> </div>	Goal Setting	Empowerment	Matrix	
			Subordinates/Self	Supervisors
13.	<p>+responsibility is to make sure the contract activity is done in an integrated fashion</p> <p>+from the project/functional interface ... directly to the individual</p>	<p>+philosophy is to push it down to the lowest levels ... needs a lot more work here</p>	<p>+some people are just not team players, with team spirit</p> <p>+feel good about the fact they're involved in a lot more detail in the development of the product</p>	<p>+pressure cooking learning intensive environment</p> <p>+not sure effective in all environments</p> <p>+doesn't do well when system under stress</p>

Table 4

Team Leaders/Functional Matrix

subjects issues	Goal Setting	Empowerment	Matrix	
			Subordinates	Self
14.	<p>+not that the project leader's incompetent, it's just they don't have a lot of experience</p> <p>+I go to my functional if there are any problems</p> <p>+if the project leader needs help he calls you</p>	<p>+probably not, depends on the decision; just in functional areas</p> <p>+we'll send a recommendation up to the team leader and then he'll decide</p>	<p>+I think engineering as a whole is quite dissatisfied and frustrated with the way decisions are made</p>	<p>+I don't even know what the organization's structure is supposed to be</p> <p>+I think it's a waste of resources in a lot of respects</p>

Table 5

Director/Project Matrix

issues subjects	Goal Setting	Empowerment	Matrix	
			Subordinates	Self
15.	<p>+you still need the experts to lead</p> <p>+I guess they have two bosses, and also get some tasks from other areas</p> <p>+I don't know where the goal is supposed to be, I think the key right now is to keep improving</p>	<p>+with the peer pressure ... it usually stays within the group</p> <p>+they're almost left on their own</p>	<p>+first level supervisors are confused</p> <p>+team members are helping each do their jobs</p> <p>+small batches are more efficient</p>	<p>+I'm getting the support I need</p> <p>+feel coming to work is fun and rewarding</p>
16.	<p>+when a real quick response is needed I just go directly to the teams</p> <p>+the span of control is just way too big for the branch chiefs</p> <p>+nobody really has power over the organization, even though we are under supply, we really answer to procurement</p>	<p>+we really give the teams a free rein</p> <p>+have authority to make the decisions they have to make</p> <p>+think that the team leaders could have a lot more ... if they take it</p>	<p>+there is a lot of work to do that's not getting done</p> <p>+system constraints are a problem</p> <p>+advantage is being part of the whole process</p>	<p>+I just feel frustrated</p>

Director/Functional Matrix

Table 6

Issues Subjects	Goal Setting	Empowerment	Matrix	
			Subordinates	Self
17.	<p>+the functional director sits down with the team and says "here are your folks, now what are we doing?"</p> <p>+it's an amalgam</p>	<p>+totally endorse the concurrent leadership model which identifies that decision making should be done with the workers at the lowest possible level</p> <p>+I've got good representation from a functional point of view, my opinions are considered and I don't have any problems</p>	<p>+having the flexibility to do the job; getting the job done</p>	<p>+we have a structure that is working well</p> <p>+sometimes the difference in structure causes us some difficulties</p>

Dendrogram Development. The prior organization of our data into matrix displays led to the development of dendrograms. Each element of data (individual comment), was grouped according to its relationship to an individual investigative question (the matrix display columns). The elements were then further sorted, placing elements together that were most alike. These clusters of like elements were further sorted in the same manner, falling into higher levels of abstraction. Branching lines were drawn so the most similar groups were connected by the shortest lines, and those most dissimilar were connected by the longest lines. Broader categories were continually connected and labeled under the broadest category titles, also seen at the head of each column on the matrix displays.

As in the development of the matrix displays, the effort of actually employing the analytical tool proved to be as much value as the final dendrogram product. The individual dendrograms are presented with the data analysis, in the following section entitled "Findings."

Findings

This research is presented in an effort to answer the first set of investigative questions, "What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?" To work toward a logical answer to these questions, the order

of precedence must be altered slightly for the analysis. Analysis relating directly to the first investigative question will be developed last, so that the analysis of the remaining questions can be used to build toward an answer of the first question.

Goal Setting. Since the actual matrix structure is central to our first investigative question, project-based structures were compared to functionally-based matrix structures. Two attributes considered fundamental to goal setting theory are goal specificity, and goal difficulty (Locke, 1978:159). Goal specificity can be degraded by the number of supervisors presenting the tasks and the lack of technical knowledge by the supervisor in the required task. Goal difficulty can be enhanced by a presumed level of knowledge of the issuing supervisor in the specified task.

Goals can be both long and short term. For the purposes of our investigation, we chose to judge short term goals from the basis of daily activities and long term by whom direction is provided and the nature of the direction provided. The first two survey questions were intended to gain information about the particular matrix structure's influence on managers in setting goals for the workers. The comments identified in the matrix display and dendrograms are mostly indirect references to the standards for establishing goals.

While several themes emerged among the responses at each level of the organization, our interest lies in common

themes that arise throughout a type of organization. These singular areas may be explained by particular relationships among the members of the matrix, or with the difficulties experienced at a particular level in the organization. Two themes surfaced among all levels of functional and project organized matrices with regards to goal specificity and difficulty. Goal specificity suffers (1) from a lack of direction provided to the work force (which we will refer to as the "lack of direction theme"), and (2) from a perceived lack of specific task understanding by the leaders in a matrix structure ("specific task theme") (Figures 8, and 9). A typical comment from project matrix members is that "the team leader relies on us to tell him what it is that we need to do." The "lack of direction theme" carries through the functional matrix in comments such as, "we have guys above us who don't know what they're doing."

The team leader matrix displays and dendrograms continue the "specific task theme" (Figures 10 and 11). The project matrix team leaders seem to exhibit trepidation about their abilities to assign specific tasks to their members. Team leaders from project matrixes tend to lack specific references for the tasks assigned. Typically they "question [workers] a lot on the things they're doing," relying on the worker to establish their own task direction. Team leaders among functional matrices echo this same sentiment with comments relating to the "need for the experts to lead." The "lack of direction theme",

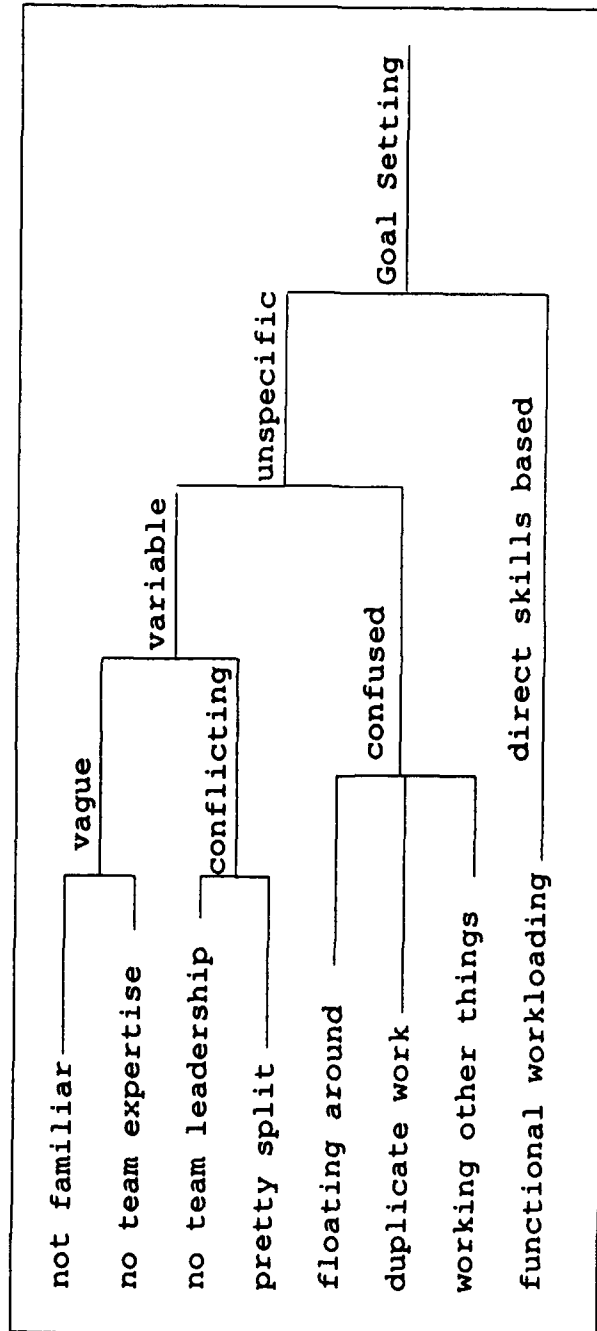


Figure 8. Members/Project Matrix.

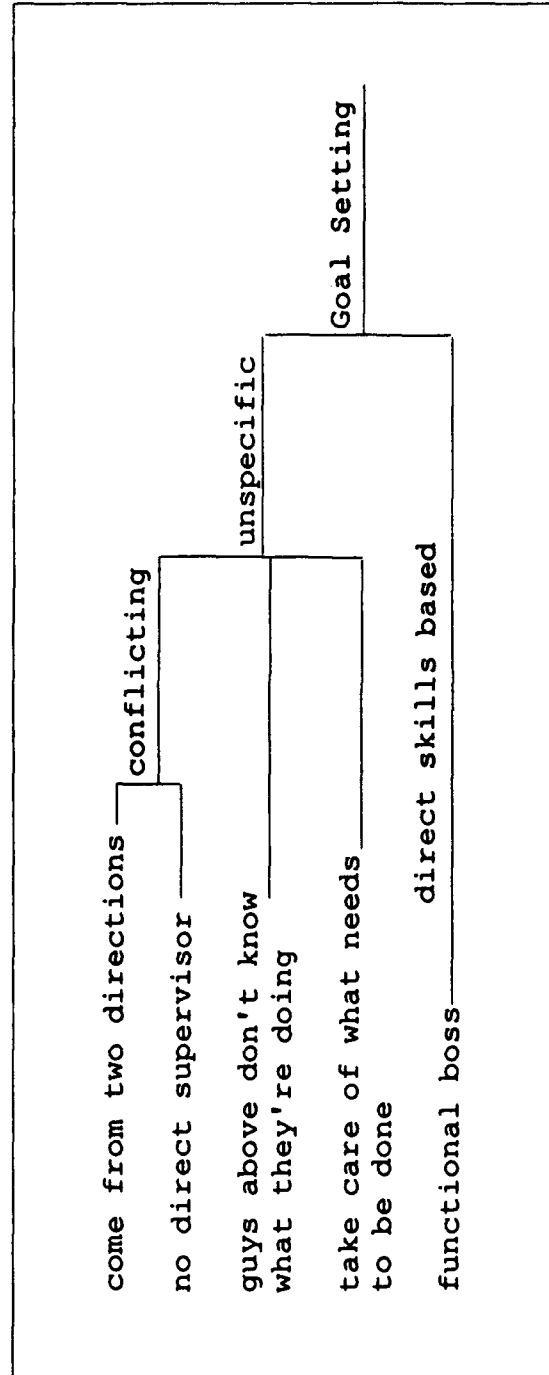


Figure 9. Members/Functional Matrix.

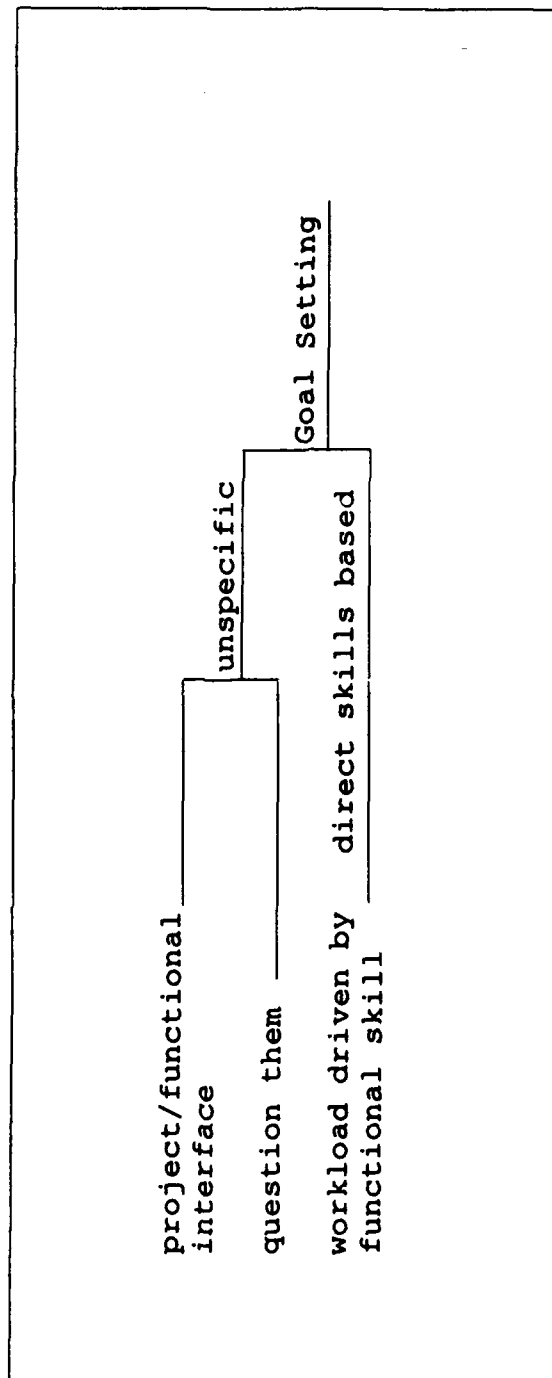


Figure 10. Team Leaders/Project Matrix.

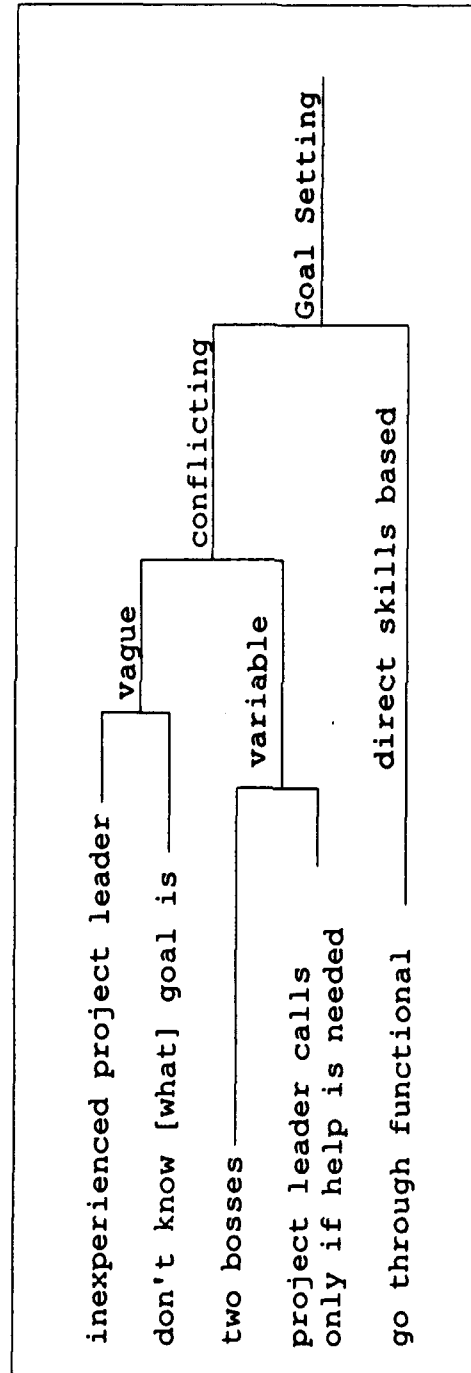


Figure 11. Team Leaders/Functional Matrix.

indicating a lack of goal setting, continues through the directorate level of management. The directors also have observed that specific goals are not passed to the workers in the matrix (Figures 12 and 13). Project matrix leaders tend to "go directly to the team" when responses are critical, or lament the "need for experts to lead" because of the required breadth of skills. Functional directorate leaders seem to echo this same sentiment in the comment relating to project leadership not "knowing what we [functionals] are doing."

Empowerment. Empowerment of the work force is fundamental to matrix organizations. A matrix organization relies upon the skills of individuals to make decisions, based upon their particular skills and knowledge. The success of any matrix organization lies in the ability of the team to generate decisions and be allowed to follow through with these decisions. These two actions directly reflect the *Direction* and *Support* tenants of empowerment presented in Chapter II. Empowerment also relies upon providing *Resources* that support actions. The *Knowledge* to make the decisions by the work force is also a requirement for empowerment. We assume there is knowledge in the work force, due to required governmental training and/or the educational prerequisites for these positions. With regards to resources, we also assume that all personnel of equal status received like resources, as is common among governmental activities. For our purposes, we gauged

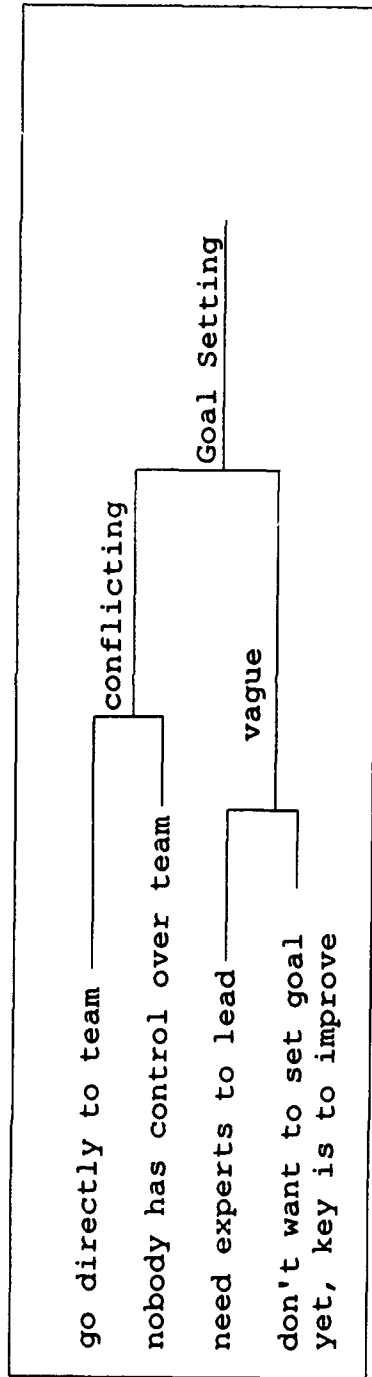


Figure 12. Directors/Project Matrix.

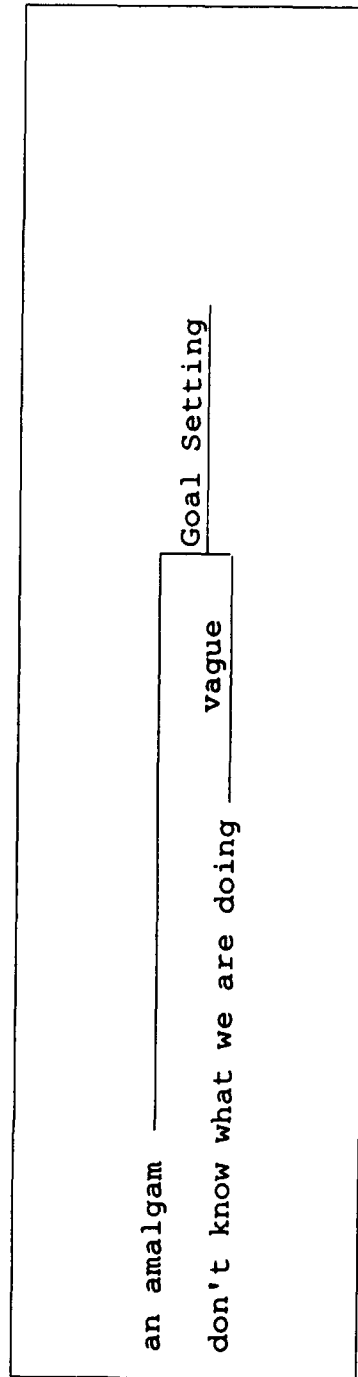


Figure 13. Directors/Functional Matrix.

empowerment by the levels of perceived support and direction provided for the worker's decisions at the next level of management, or by the level of support the team is perceived to have.

The elements concerned with empowerment are in the second column of the matrix displays. Two conflicting themes emerged from the development of Team Members dendrograms (Figures 14 and 15). Personnel from project matrices presented a theme representing empowerment, while those from functional matrixes perceived little apparent empowerment. Project members who felt empowered believed their decisions were recognized as significant, and felt they "[could] basically do what [they] feel is best." Once the process flow within the functional structure was analyzed, the pattern of next higher review was apparent. This may have led to perceived lack of empowerment among workers of functionally structured matrices. The members of functional matrices expressed their lack of empowerment with statements such as only "present[ing] a recommendation", or feeling they "have to say Mother may I" in making a decision.

Empowerment issues were further explored at the team leader levels of project-based matrices (Figures 16 and 17). However, the trends were different than those presented by the team members. Team leaders of project matrixes tended

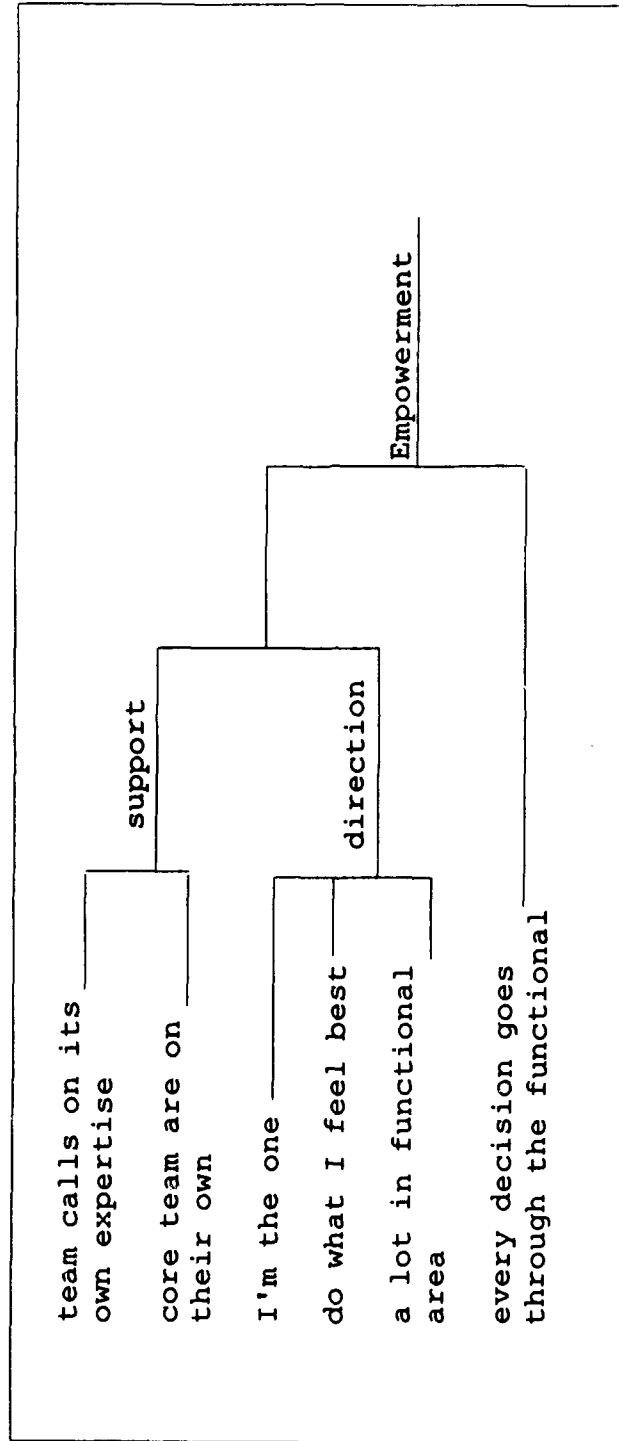


Figure 14. Members/Project Matrix.

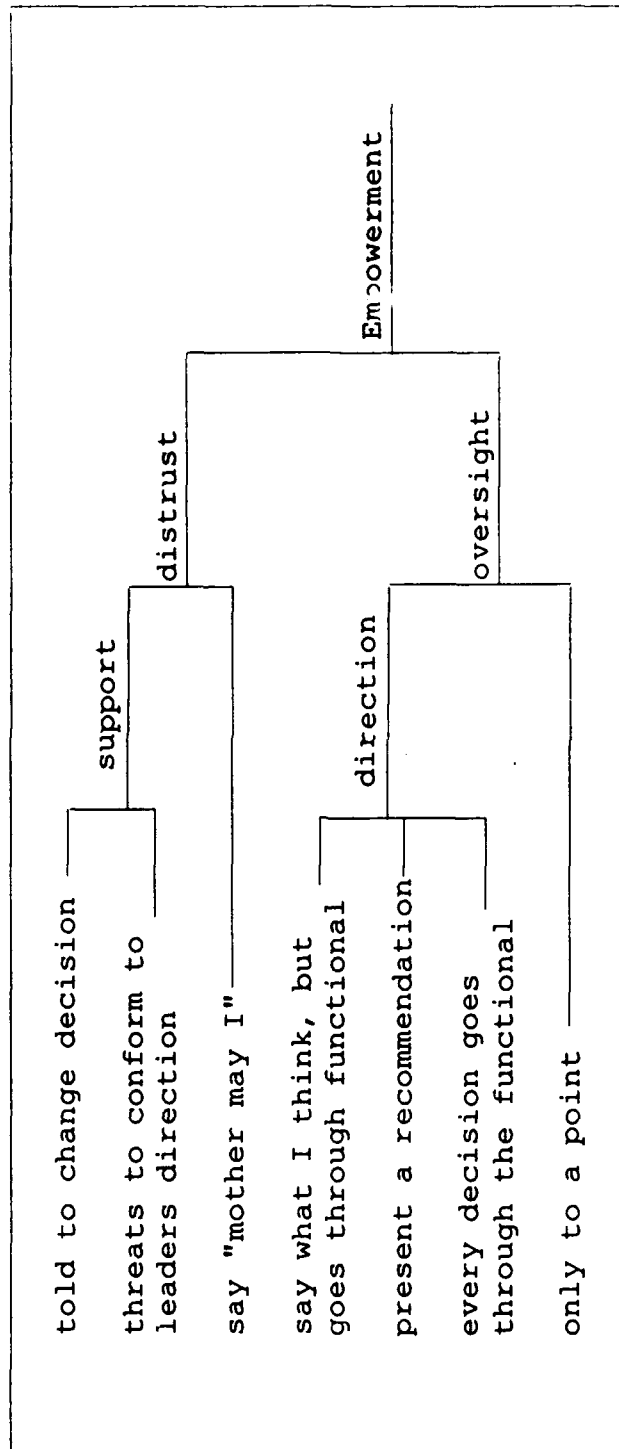


Figure 15. Members/Functional Matrix.

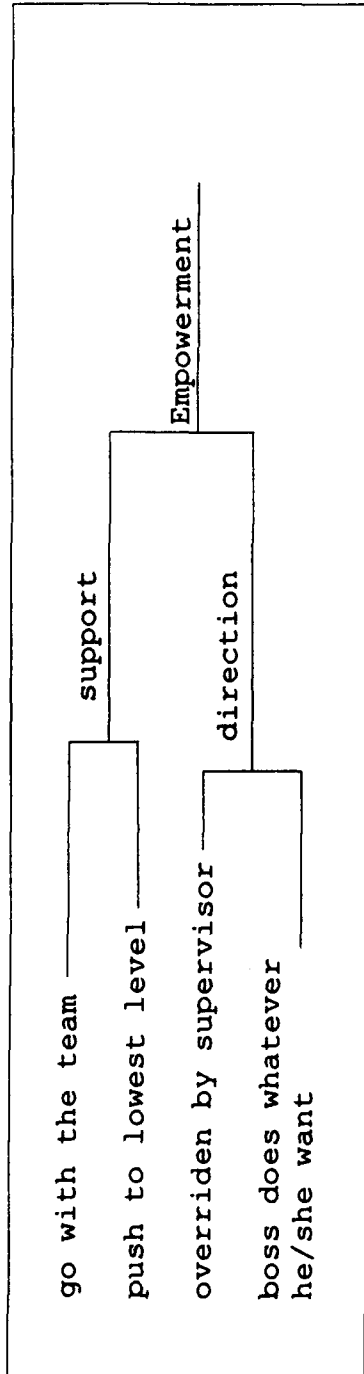


Figure 16. Team Leaders/Project Matrix.

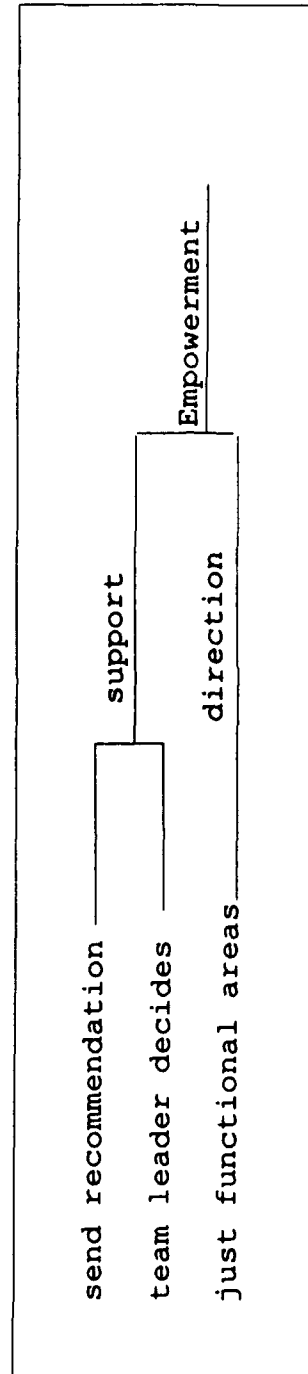


Figure 17. Team Leaders/Functional Matrix.

to believe that they either (1) have empowered the team members, but that the team itself does not have the power to follow through on their decisions; or (2) have empowered the team members, and the team itself is also empowered. Some team leaders perceived that decisions were made at the next level in spite of the teams efforts, as represented in the comment "she's my boss and can do whatever she wants," and "she usually overrides the team." The support of empowerment is just as easily represented by the comment "the philosophy is to push it down to the lowest levels," and to "go with what the team wants." The theme presented by team members of functional matrices continued through the team leader's level. Decisions presented by team leaders take the form of "send[ing] a recommendation up to the team leader and then he'll decide." It is interesting to note the lack of comments by the team leaders of functional matrices, regarding team member's empowerment.

The themes representing empowerment in the previous dendrograms did not continue through the directorate level (Figures 18 and 19). Both the project and functionally-based matrix directors granted empowerment to their personnel at all levels, especially the team members. Empowerment among project matrices is represented by the comment, "we really give the teams a free reign," and from functional matrices by "decision-making should be done by the workers at the lowest possible level." Reservations were also expressed at the directorate level as represented

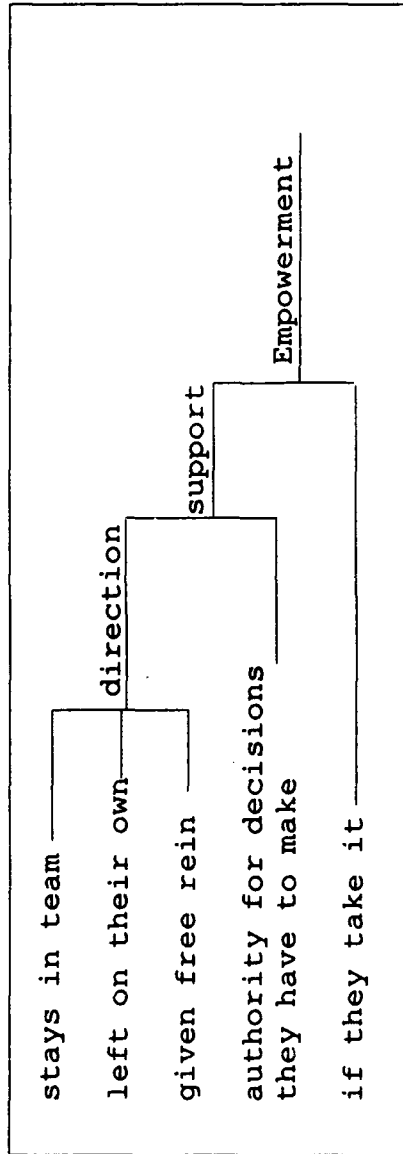


Figure 18. Directorate/Project Matrix.

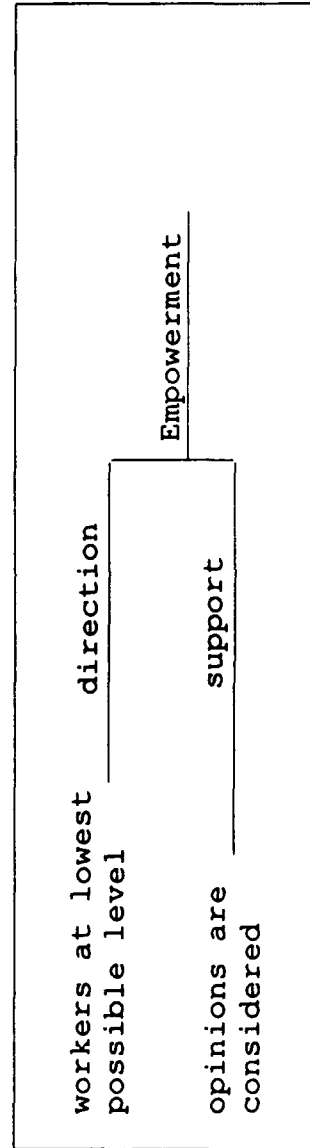


Figure 19. Directorate/Functional Matrix.

by the comment "team leaders could have a lot more [sic] if they take it".

Organizational Effectiveness. This area is the focus of the remaining two questions: "What is the impact of differing goal setting and empowerment practices?" and "In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?" Since matrix organizational structures are a recently defined phenomena in government, it would be difficult to design an objective quantifiable measure. This is especially true when considering the differing definitions of matrix organizations presented earlier in this thesis. We chose to rely solely upon the perceptions of the people directly involved for two reasons: (1) the interviewees have been members of the matrix organizations since their inception and thus, have insight into what is happening; (2) since the effectiveness of the structure is in question we wished to separate the bias of measures which were designed to evaluate the "old" functional organizational structures. In addition, we asked for suggestions to improve their organizational structure from its current definition, with a desire to develop themes that may have eluded detection through opinions of effectiveness.

Operational effectiveness was evaluated among the members by their perceptions of effectiveness and how they believed their peers and superiors would rate organizational effectiveness. Common response themes among the members

related to personality characteristics of the particular teams' leadership (Figures 20 and 21). A significant theme emerging from project matrixes was the performance of functional workers. Many felt that isolation from functional peers inhibited their overall performance. These members felt their capabilities were reduced because they no longer had the support of functional peers who they consulted as sources of information. Typical of this concern is this comment, "I sit with the project team - that can be a problem. I can't possibly know it all." Many also see the benefit of sitting with workers from other functional areas. They see the cross-flow of information enhancing their capabilities, although this was caveated with the preference for only having the most experienced functional individuals assigned to their teams. Functional matrix members also recognized the benefit of working closely with other functional areas. In previous non-matrix structures, they had been unable to see their work as relating to any tangible goals other than task completion. Personnel at the worker level referred to the previous structure as a "vacuum" when compared with the current matrix structure.

The most common themes among team leaders were the confusion caused by the managerial structure, and perceived efficiency problems (Figures 22 and 23). This may be due to matrix organizations being relatively new and that team

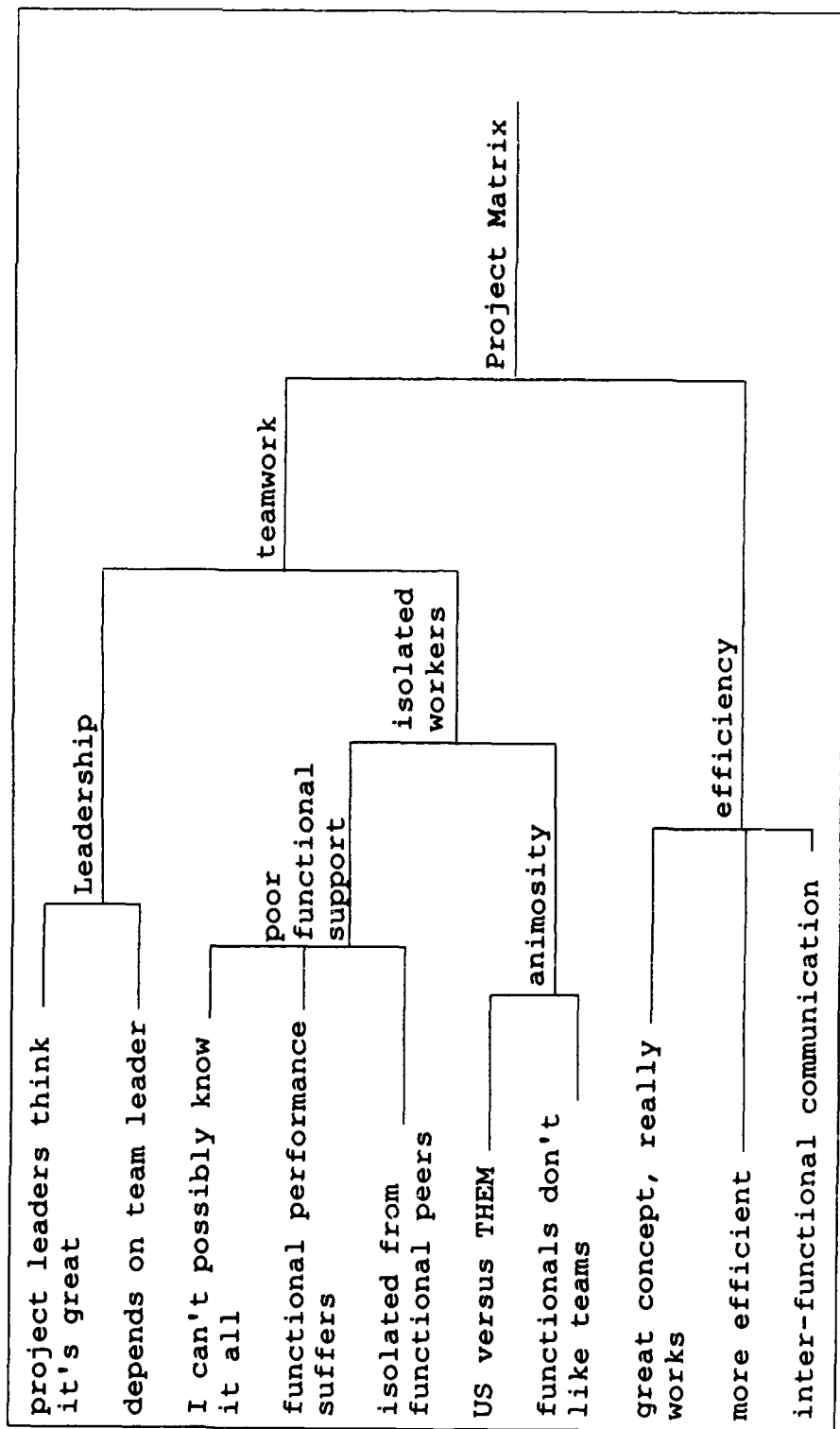


Figure 20. Members/Project Matrix.

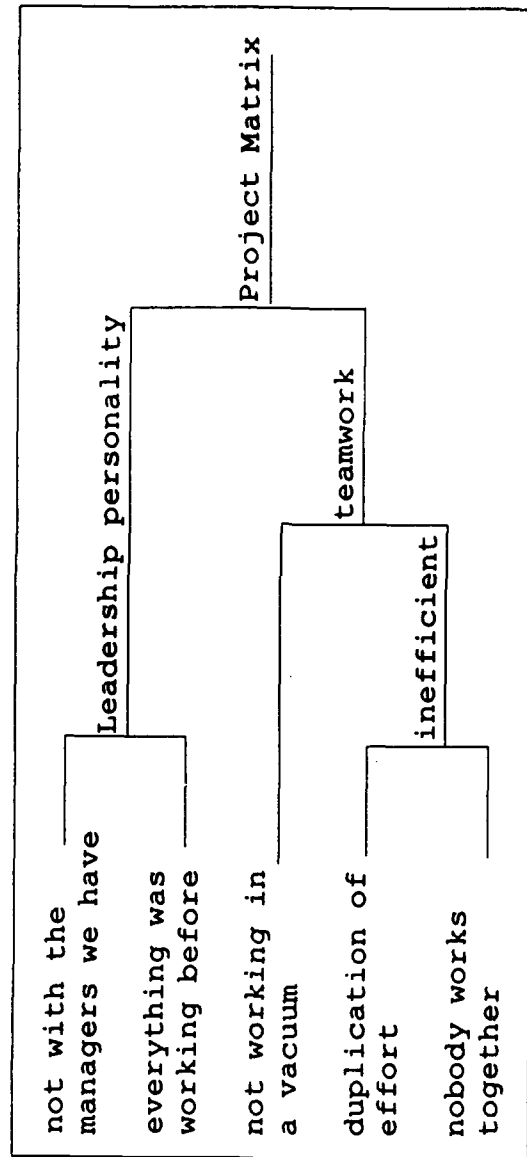


Figure 21. Members/Functional Matrix.

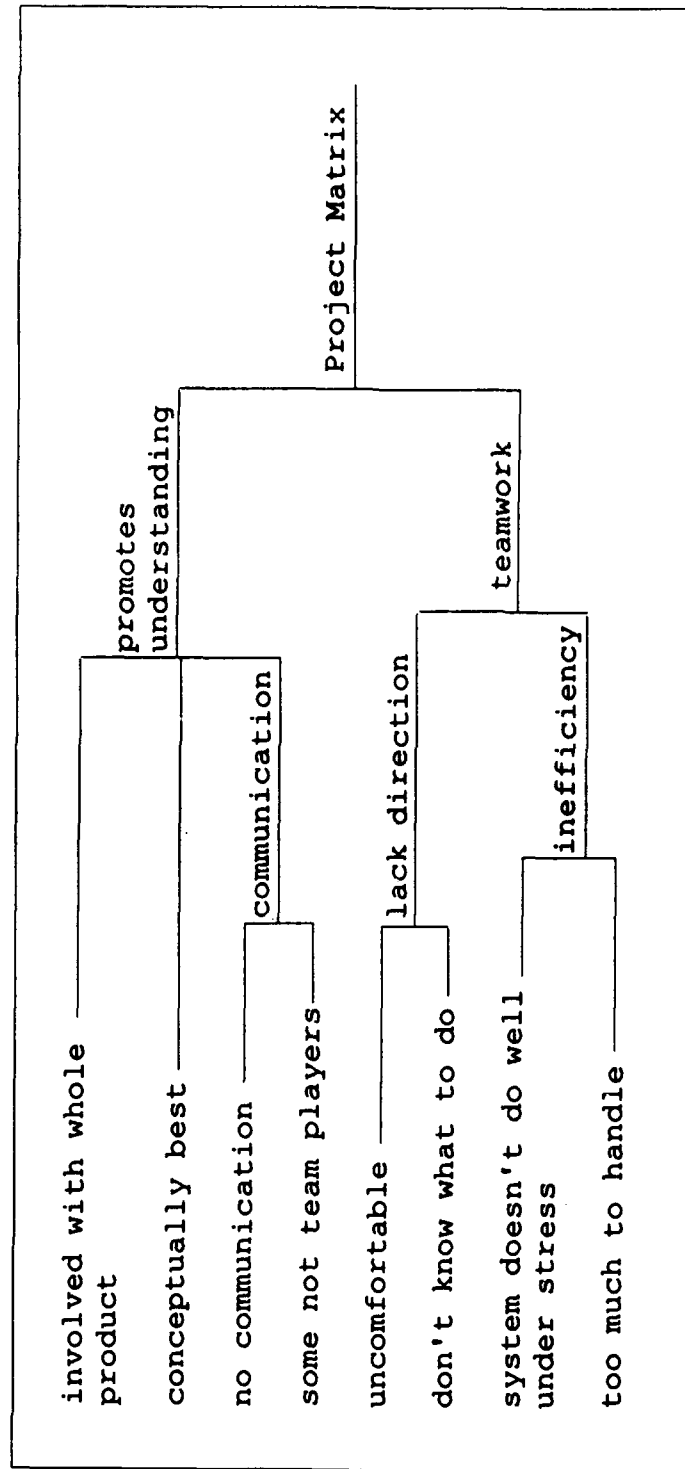


Figure 22. Team Leaders/Project Matrix.

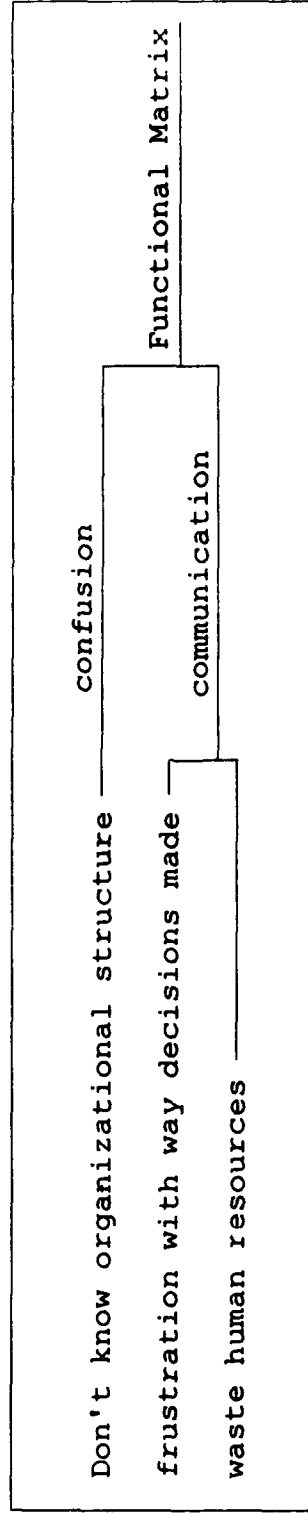


Figure 23. Team Leaders/Functional Matrix.

leader positions have yet to be fully defined. This was reflected in the functional matrix comment,

"I don't even know what the organization's structure is supposed to be," or the project matrix team leader comment that they have "an uncomfortable feeling" about leading personnel from other functional areas. Responses also echoed a concern for the inefficiency of matrix structures. One team leader believes the functional matrix is a "waste of human resources," while a project matrix team leader observed that "the system [project matrix] doesn't do well under the stress of an unstable environment."

Directors of project matrix organizations presented themes that parallel their team leaders (Figure 24). They also viewed improved cross-functional communications as a way of improving understanding among the workers, and presumably of improving the quality of work. Greater significance is given to the emergent theme of inefficiency and confusion among the team leaders and members of their organization: project matrix directors "feel frustrated" about "a lot of work . . . that's not getting done." The same root theme presented by the team leaders was identified here as confused supervisors. Oddly, the functional matrices' directors do not present the same themes (Figure 25). Functional matrix directors identified effectiveness and teamwork as benefits of matrix organizations. They felt they "have a structure that is working well," with the "flexibility" needed to get the job done.

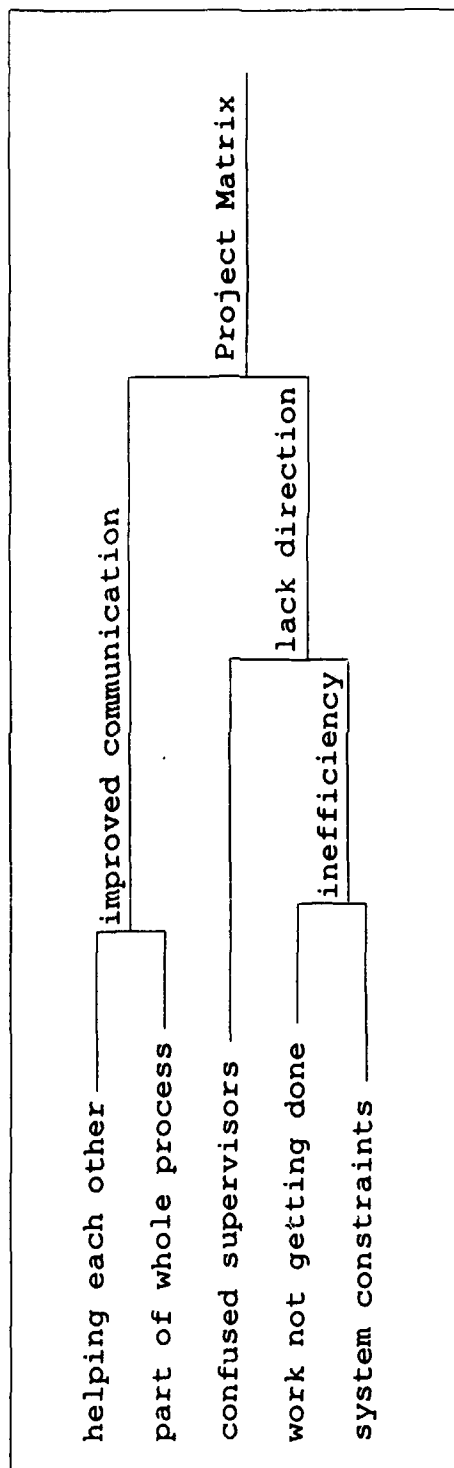


Figure 24. Director/Project Matrix.

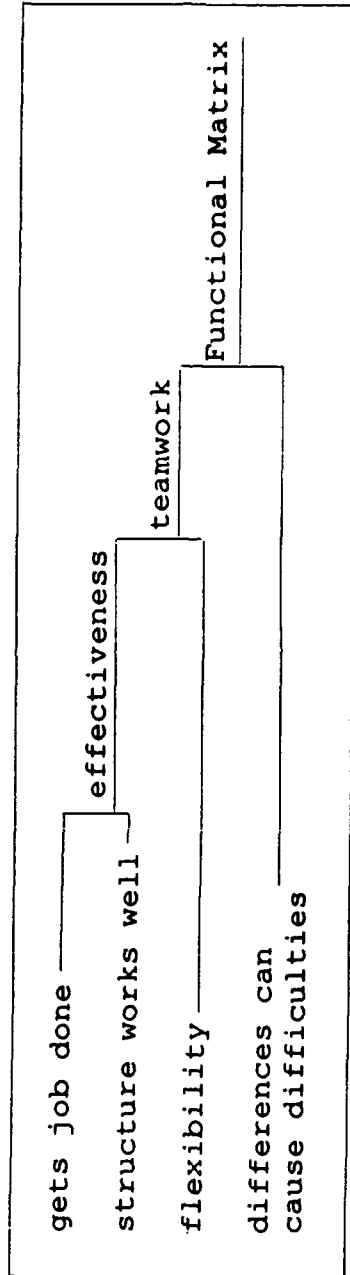


Figure 25. Director/Functional Matrix.

Chapter Summary

This chapter presented the analysis of the interview data collected about project and functional based matrix organizations. First, all responses were presented in matrix displays, classified by respondent. This allowed the reader to return to particular comments and relate those to the same respondents comments in other areas of the study. Next, we used dendrograms to present all the goal setting responses and relayed the discovery of dominant themes within the data. This provided greater focus and the foundation for the further examination of the important issues concerning matrix organizations.

In Chapter V, we will examine the conclusions derived from the analysis and present the conclusions found about matrix organizations. We will provide recommendations for matrix organizations in answering the final research questions, "What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?"

V. Conclusions and Recommendations

Chapter Overview

The previous chapter presented the analysis of the interview data collected about project and functionally based matrix organizations. This chapter provides conclusions drawn from our analysis in Chapter IV. These conclusions individually relate goal setting and empowerment practices to the perceived effectiveness of project and functional matrices. The discussions are used to resolve the investigative questions: "What is the impact of differing goal setting and empowerment practices? In matrix organizations, do they differ in accordance with whether they are managed by a project or functional manager?" Portions of the questions are addressed separately and then are integrated into a total conclusion.

Chapter V also provides recommendations for managers of matrix organizations. This section is offered as an aid to managers of matrix organizations, so they may gain insight into sustaining good goal setting and empowerment practices. The conclusions were drawn from the data analysis accomplished in Chapter IV, and are presented here in relation to the findings of the total interviews. We recommend the reader review the interviews in Appendix B for a better understanding of the recommendations.

Goal Setting Conclusions

As presented in Chapters I and IV, two attributes considered essential to good goal setting practices are goal specificity, and goal difficulty. We felt that goal specificity is diminished by more than one supervisor presenting tasks to the worker. Likewise, a project manager's lack of knowledge of functional performance requirements inhibits the concept of goal difficulty. The task should be challenging enough to improve motivation and performance, but not above the presumed level of knowledge, so that the goal produces frustration or apathy. We evaluated both short and long term goals as a basis in preparing our conclusion.

Goal setting among matrix procurement personnel is obviously difficult at best. From the dendrograms presented in Chapter IV, we can establish that both project and functional matrix managers have difficulty establishing appropriate goals for their workers. Within the project matrix, short term goals are established by a project leader who seldom has full understanding of functional tasks assigned. This situation leads to goals that are nonspecific and may be at difficulty levels that are incongruent with the worker's experience and capability. Appropriate task specificity and difficulty assignment could be improved with perfectly knowledgeable managers, regarding all functional and project areas. Understandably, this is an impractical solution, since even the team members realize

that a person could not know everything in one functional area, let alone all areas. Goal setting is an area where awareness is a high priority. Team leaders must be especially aware of their own lack of understanding of functional specifics while setting goals. When establishing teams, directorates should seek leaders who are confident enough in their own leadership abilities to seek understanding about functional knowledge. Team members who knowingly possess better understanding about their functional areas should try to educate their team leaders about the underlying requirements of the assigned tasks.

One advantage of matrices found in our literature review was matrix personnel frequently have a better understanding of the whole project, and hence better goals are established for the functional workers in matrix organizations. From our data, this seems to be a benefit for the team leaders, rather than the actual workforce. Workers in project matrices must rely upon their own understanding of the project leader's "goals" and adapt these to the project's functional requirements which they are trained to accomplish.

Both team leaders and directorate level managers recognize the goal setting difficulties. When functionally related questions must be answered (for example, critical contracting questions), matrix directors tend to by-pass the team leaders, and go directly to the functional worker in order to expeditiously obtain answers. This demonstrates

the lack of task knowledge by team leaders. Without an expressed confidence in the ability of team leadership to understand and communicate the technical task requirements, it is unlikely that the team members will accept the goals, even when they are appropriate.

Goal setting could be an area confounded by the complexities of our sample population. Procurement of weapon systems or spares requires extensive knowledge in numerous functional areas. Most of these areas require extensive training and/or higher educational degrees. Due to the job's professional nature, the workers are more likely to intrinsically understand the system's requirements and establish their own goals to coincide with expressed needs. Thus, matrix personnel seem to function reasonably well, without many specific goals being set by managers.

Empowerment Conclusions

Closely related to the knowledge required to work within these function positions, is the knowledge and resources required to support the actions taken by these managers. The areas of empowerment we were concerned with were *Direction* and *Support*, as discussed in Chapter II. In project matrices, most workers feel some level of empowerment; however, this feeling does not continue through all organizational levels. While the workers feel empowered, the team leaders do not feel the same and the matrix directors feel that the level of empowerment afforded

to both the team leaders and team members is high. In functional matrices, this conflict among levels carries through in the opposite manner, as described below.

Within the project matrices, this contradiction regarding empowerment could demonstrate the lack of team leader understanding discussed in *Goal Setting*. When the worker presents a decision to their team leader, this must be regarded as an expert decision. This is not necessarily bad, in fact, in reality this is one of the benefits of matrix organizations. Project matrixes promote communication between functionals, accelerating decision making, while providing the project manager with expertise. From the worker's standpoint, they feel their decisions are integral to the project's direction.

The team members of functional matrices described a chain of justification, review, and approval that all their products must proceed through. They did express a feeling of confidence in their own decisions, and some expressed supervisory support of these recommendations. In contrast, the functional managers within functional matrices also felt their workers are empowered. While the decisions made by workers within functional matrices are considered just as valid by their managers, the old style of checks and approvals gives the impression of mistrust to the workers.

The data for project matrix team leaders presents us with a dichotomy. While the team leaders felt the team has been empowered, team members feel the support they have

received from their managers is less than adequate. We do not feel this coincides with the literature of commercial matrix organizations. This is probably caused by the superimposition of the existing governmental organizational hierarchy over matrix structures. Project matrix structures are, by definition, established with very few vertical levels of authority. The project structures we observed had an intermediate level of management interposed between the directorate level and the team leaders. This level maintained authority over the team leaders but was omitted when the directorate manager deemed it more expeditious to go directly to the team. This action may actually undermine the team leader's feelings of empowerment since the duties they are responsible for are reviewed and approved by the next higher authority, when it should not be required.

When government organizations intend to establish any new form of organizational structure, they need to develop a better understanding of the reasoning behind the structure before they impose *normal* government procedural levels. Both project and functional matrices are established with the intention to empower the worker closest to the job to make decisions related to their position. This extra level of management between the directorate and team leaders tends to perform the same functions discussed under functional matrices: checks and approvals, which inhibit a feeling of empowerment.

Matrix Effectiveness Conclusions

Two areas of observed effectiveness were affected by matrix organizational structure. Matrix organizations probably influence both the internal effectiveness and the external effectiveness of the structure. Internal effectiveness concerns the operations within the teams, how the members interact, and how they feel their effectiveness has been influenced by the matrix organization. External effectiveness is how team actions are communicated and dealt with by the greater organization.

Members of project matrices exhibited concern about team leadership. While nearly every interviewed team member felt working relationships were good, they also caveated this by saying they didn't feel every team had the same good relationship. We felt that comments about team leader personalities did not affect the matrix structure, and as such were ignored unless specific influences were cited.

Internal Effectiveness. While the majority of interviewees felt a matrix organization is a highly effective structure, the isolation of the functional workforce from their colleagues causes concern. As one member said, "I can't possibly know it all." We felt, as did the functional workers, that their physical separation inhibited learning from functional coworkers. Project matrices rely on a member's highly developed functional skills to operated effectively. Functional skills are formally taught to personnel, but most workers feel that

additional learning results from interaction with their coworkers. This learning takes place in the work center between members of like disciplines. Functional skills were assured in all the organizations we studied, because each unit was a select group of workers. Matrices were being used as a trial to evaluate their effectiveness for organizational implementation. A common concern among the functional workers is that the additional learning and trainee skills gleaned from coworkers may not be fully developed, should matrix structures be adopted by all areas of the organization. It may be difficult for new employees to attain complete training when they aren't collocated with functional co-workers.

While isolation from functional co-workers could create a competency problem, both functional and project matrix workers feel that working on a team with counterparts from other functional areas enhances their effectiveness. Teams working together feel their job requirements are better understood by their coworkers. Teams working common projects also strive harder for an understanding of the difficulties, from the other functions' perspectives. With teamwork, questions and problems are solved without the formal paperwork trails which saves processing time, and contempt among the differing functional areas. Thus, there is a trade-off between sitting with functional coworkers and sitting with the project team.

External Effectiveness. External effectiveness is also affected by the uniqueness of the matrix organizations within the greater organization's older functional style of organization. Since the matrix structure is so dissimilar, the workers have experienced problems communicating with other work centers. This is definitely not a reflection of matrix organizational structure, but a need for an individual office to structurally reflect the organization as a whole. A similar overall structure would prevent unnecessary communication confusion, since all personnel in both groups would have a direct counterpart.

Since matrices are relatively new in the government and they are unique in terms of assigned personnel, we feel that it would be unfair to judge the effectiveness of matrices at this time. An evaluation of matrix effectiveness should be accomplished when matrices are implemented throughout these organizations. This is particularly true of the DLA organizations, who were still in the pilot program stages at the time of the interviews.

Integrated Conclusions

Neither the project nor the functional matrix organizations provide goals which meet the criteria set forth in Chapter II; that is, specific goals which are at a level of difficulty commensurate with the personnel's capabilities. Functional matrix managers fail to provide the specificity of goals that is attributed to high

performance. Likewise, project managers do not know the requirements for each respective functional discipline well enough to assign tasks of appropriate difficulty. However, this does not seem to interfere with the perceived performance of matrix organizations. In the organizations we studied, all team members were professionals who are expected to know their duties and requirements to complete any given task and thus, have an understanding of their functional goals. The project manager's broad-based, general-level instructions are, in fact, adequate for the team's personnel. The project matrix structure promotes cross-functional communications which serve to provide specifics about the assigned tasks. The project leader in a project matrix may be somewhat lax, but the organizational structure serves to fill in the specifics. In a project matrix, task difficulty must be communicated from the members to the team leader. It is critical that team members are fully qualified and experienced in their field before being assigned to project matrices.

Functional matrices lack the level of cross-functional communication available to project matrices, which may cause the workers to have little comprehension of how their piece fits into the overall project. Without this knowledge of purpose, goal specificity causes complacency among the workforce. A typical example is urgent requirements going to the next office and becoming lost in the shuffle. Project matrix structures do not suffer this complacency,

because the final goals are communicated among the team members.

"What is the impact of differing goal setting practices?" Neither structure performs well in the classical sense of goal setting. Due to their inherent cross-functional communications, the team structure of project matrices better serves the setting of proper goals. Project matrix members consistently spoke of improved performance once the organization was established. Functional matrices considered their performance equal to that of the prior organizational structure. From the view of classic goal setting, the impact of project matrices show improved effectiveness. Functional matrices, on the other hand, neither improve goal setting practices nor improve the perception of effectiveness of the workers.

"What is the impact of differing empowerment practices?" Empowerment also differs among the matrix structures. Functional matrix managers feel that their personnel are empowered to make decisions based upon their abilities. But the typical decision structure shows the worker's recommendations being passed up the chain for decisions at the functional manager's level. We fully agree with the manager's opinion that they "go with the members recommendation"; however, the perception of the team members is that their recommendation is not the final decision.

One theorized benefit of project matrix is the reliance upon the empowerment of the functional experts to make

decisions. Oddly, this is not the case with the organizations we studied. The team members' decisions were upheld within the team, but the superimposed middle management tier detracted from empowerment. However, empowerment still produced benefits. Within the team structure, project matrices' empowerment practices resulted in lowered response time, reduced paperwork, and improved cooperation among the functions.

Recommendations

Project matrices appear to produce the greater return in terms of perceived effectiveness. This must be tempered by the need for all functional team members to be fully qualified and for team leaders to be open in regards to functional requirements. In addition, there is a need for an established system to exchange functional information in order to maintain proficiency and also for the matrix structure to remain faithful to the flat structure depicted in literature.

Goal setting and empowerment, as we have shown, rely upon fully qualified team members. To place a lesser skilled person on a team undermines the effectiveness of the team. Thought should be given to establishing training offices in each functional area that provide for fully trained personnel prior to placement in matrix organizations. In this manner, inexperienced personnel can gain from being collocated with functional coworkers until

they are fully trained and have established contacts for future sources of information. After this is accomplished, they can be matrixed and benefit from being collocated with personnel from other functional areas.

Managers who are chosen as team leaders should be selected for their leadership ability and openness. They must realize that while their job is to manage a successful project, one of the keys to this success is empowerment of personnel. When workers feel they are respected and trusted, they tend to work more diligently, take on more responsibility, and communicate better across functions in order to get the job accomplished. Workers also need to feel an openness from the team leader which encourages communication up the chain, since the project leader must depend on the workers for their functional expertise.

Functional leaders need to adapt and learn the new role of giving support, rather than giving direction. Early in a matrix conversion, they may want to work as a team on the communication problems and set up the training areas. In one SPO, one of the interviewees said that a group of functional leaders formed their own team and used their expertise to do much of the preliminary legwork on major projects. Such a team could save a project time and money.

Chapter Summary

This chapter presented conclusions derived from the analysis and conclusions found about matrix organizations.

These conclusions addressed our investigative questions that had not been addressed in Chapter IV. The chapter also offered recommendations for managers of matrix organizations, which may provide possible insight into sustaining good goal setting and empowerment practices. These recommendation related the conclusions drawn from the data and other general information derived from the interviews.

We concluded that goal setting is not prominent in matrix organizations, but that it may not be as necessary in government matrix offices as it may be in other areas. In the government acquisition arena, functional goals and guidelines are fairly standardized and are established during training in each function. Therefore, these goals come with the functional personnel and it is not as necessary for project leaders to provide specifics in goal setting.

Empowerment on the other hand, is critical and was found to be fairly prominent in project matrices, although middle management sometimes interfered. Overall however, empowerment practices and the team concept produced benefits in lowered response time, reduced paperwork and improved cooperation among the functions.

Our recommendations included that team members be fully qualified and trained prior to being matrixed to a project, project and team leaders be selected for their leadership qualities and openness, communication channels be

established for exchange of functional information among the
leaders, and that new roles of support be included in the
functional leader's responsibilities.

Appendix A: Interview Questions

Each of the questions that are typed in bold will be asked of the interviewees directly. The questions that are listed below in non-bolded type will only be asked as needed to help guide the interviewee in covering all the necessary points. The exact terms used during the interview were adjusted to coincide with the terms used by the interviewee.

From your experience in a matrix organization, please answer the questions that follow.

1) (for the purpose of Matrix Structure) **What do you see as the responsibilities of each of the managers (functional and project) in you office?** If the interviewee is a manager: **What are your responsibilities and what are those of the other managers?**

Are there two different managers who are responsible for various tasks or functions? What does each one do?

Who assign daily tasks?/ Who is responsible for performance evaluations?

Who has control over resources?

Who has control over the design of technical requirements?

2) (for the purpose of Goal Setting) **Who determines the the day to day activities of the project?**

Who assigns your daily task?

What work do you do on a day-to-day basis?

3) (for the purpose of establishing Empowerment) **What latitude are you given in decision-making?** If the interviewee is a manager: **What latitude are your subordinates given in decision-making?**

How do you employ groups to make decisions?

How are committees established, and what are their responsibilities for investigating problems and making decisions, or offering recommendations regarding the problems?

How are decisions made by the managers (either functional or project)?

4) (for the purpose of establishing goodness of the employed organizational structure) **What is your perception of the level of satisfaction in you organization?**

How effective/efficient do you think the matrix structure is?

Do you think your peers feel the same way you do?

Do you think you superiors (subordinates) feel the same way you do?

5) (for the purpose of establishing goodness of the employed organizational structure) **What is your impression of the organizational structure and its level of effectiveness?**

6) (for the purpose of establishing goodness of the employed organizational structure) **What changes do you think could improve the effectiveness of the matrix organization?**

Appendix B: Interviews

The interviews are presented in three sections in order of precedence from Team Member, Team Leader, and Director. Within each group, project matrixes are presented before functional matrixes structures.

To preserve anonymity, we eliminated all references to proper names, and tried to eliminate any referances to locations as much as we were able.

Interview #1

Functional Member, Project Matrix

1) Our team leader! His responsibility is what normally a program manager's responsibility, I mean they work together, he just makes sure that everything gets done on time, he is kind of a liaison between the team itself and the users and the outside functionals and so forth. He kept in close contact with the users during the whole program, and looked at the requirements and made sure everything was in order. Basically helps our supervisors just making sure our jobs getting done. He pretty much let us be autonomous during the whole process and he relied on the contracts people to get the work done and he relied on us to tell him what it was we had to do and when it was due and so forth. We pretty much handled it that way with all the functionals.

We've got like a supervisory contracting person in my three letter and he manages the contracting people within the subgroups because they don't have three letter and his job is mainly just to make sure the work load is appropriately distributed and to handle personal matters like a liaison between the three letter contracting people and the individual team members. - Our team leader. He relies on us to tell him what it is we have to do because he can't be an expert in all the different functionals but for the most part it's probably the team leader who decides once he knows what it is we have to do and he makes sure that it gets done. He [the Functional Director] is really pretty isolated from us overall, every now and then he'll say okay this is a PK thing that has to get done and he'll make sure those type of things get done, but as far as the day to day program tasks he's pretty much out of the way. - Supposedly the team leader, but the way it is set up - that is a problem with his type arrangement. For example: last year the evaluations were written by our team leaders - I believe, but they had to be approved up the contract chain. So what it came down to is they had to take the reports from all the team leaders and see what the recommended ratings were and they had to decide how many people would get this or this - so the ratings in several instances at least, I know came out different than what the team leader recommended, because they had to make sure that everybody didn't get superior or whatever. So I think this is kind of a problem with the system because the person that's ultimately making the decision on who gets what rating, in a lot of cases is not familiar with the day-to-day work of all the program members - because they're kind of isolated, you know they're not involved in the day-to-day work. - You mean the functional resources? Yes! We kind of like to work together I guess because the program three letters - they know what the work is and how many people they need to do it. Then they have to go to the three letter functional

to make sure they can get the resources they need and they kind of have to work together to allocate the people to the teams. We get our requirements from users, whatever they need they tell us, but as far as writing a statement of work it would probably be the program manager or the team leader will do it. - Yes, system specification and that type of information is written within the team, but they work very closely with the user to make sure they are getting whatever the user needs. As far as the day-to-day program markets, the team manager has the power. Functional manager will - I'm thinking the level like in between the project teams and the three letter staffs. I mean that three letter has a lot of power when it comes to contracting resources because they are constrained by PK. But as far as the team - the project work, the team manager has all the power. They both have to be involved, like I guess I think of the left side as being more of a staff, like the graybeards or you know if this two-letter has a question - "is this a smart way to proceed with this?" - like in a contractual area and you rely on this person. Indirectly, it is kind of like a matrix really. I mean these people are working individual projects but yet they still have to go through the functional manager. Well, with matrix they say they have two bosses and in this case a lot of times, they have three or four. There are different activities that go on over here, like we've got a reviewer who reviews all the actions and I think of him as our kind of policy person - if I have a question I call him up and ask him. They also do - like metrics is big now you know, as far as statistics on what is going on in different areas. They do like a lot of the recording type activities that a normal staff office would do. So as far as their area of expertise, they carry a lot of weight because the two letter really listens to them. But as far as day-to-day program issues - I mean these are the people that are most up to date with them.

2) There was a time during the program where we were getting a lot of input from the left side [functional] of the organization. We were kind of a guinea pig program, we started out in the old structure and we had already made our decisions.

3) As far as my job, just doing the individual contracting work for my team, I'm given a lot of latitude and that is due to my team leader. Anything higher than that goes up the chain if it is more of a broad decision. My program team, yea - if it involves the whole group, we normally get a consensus before we do something. With the team he'll pretty much call on our expertise. He relies on us to go through our functional chain if its required or needs approval of the contracting unit.

4) I'd say there is a high level of satisfaction on our team. It's like with everything else, it depends on what office [team] you're with. It depends a lot on the supervisor and the other people in your office [team]. On my team we all get along very well, and we have an exceptional team leader. There were a lot of issues that we really discussed between ourselves before we came to a decision. Then we reorganized and we were getting all the help from the left side . . . they were coming in and redoing a lot of the things we had already done. Because of that the team was really frustrated for a while. It wasn't really from what the team did, it was from all the outside influences we were expected to consider. Now its good that the project and functional sides start out together. When we started we had our whole package finished and they came in and reviewed it. Then they expected us to incorporate all their inputs, which affected a lot of the things we already decided. We looked at what they told us to do and had to explain why we were doing the things the way we were. It really helps a lot to get their input early since they have a lot of experience in many different areas. They really need to start out overseeing from the start of a program.

5) For the most part yes, there are a couple of things like the evaluation system. I think there are a lot of problems in that area. I think the communication is a lot better between the functionals and the project. Our team leader keeps in contact with users a lot, and we get in on a lot of those meetings too. We have everybody working that program sitting together every day, so instead of being left out of the loop, anytime anything happens we know right away. So its really effective for the program. Each team is different because of the different team leaders. I think for the most part now people are satisfied on the team, though there may be a couple that aren't. I think there were some problems at first just because of the changeover and people weren't really sure where they stood or what their roles were on the teams. There were also problems too from the staff functions; they were used to having a lot of power to work one-on-one with the program side and saying this need to be done this way, and now they can just give us recommendations, they don't have any control over the programs like they did before. So I think a lot of them were dissatisfied with teams, and some of them still are. - He's pretty satisfied, though to tell you the truth, I don't think he really knows what his role is. Since they are not involved on day-to-day activities like before, I think they feel pretty left out. They may be broadsided by an issue now that they aren't familiar with. It's up to the team people to keep their functionals advised of what's going on in their team all the way up the chain, since you're working with your team day-to-day. We have to

continually change gears and think "I have to tell this supervisor and make sure he tells their supervisor to keep them abreast of all the issues." The functionals tend to not hear about things a lot. When I'm on a team I have to let my functional supervisor know everything that I'm doing and the contracting supervisor. It is very effective as far as program issues go, like timeliness and everybody working together. I do think one thing that has suffered is the functional performance like for instance instead of all the contracting people sitting together, now we're isolated in different areas with different teams. And before if an issue came up that I was unfamiliar with, it may have happened before on another program and you could just lean over and ask if you have ever heard of this and get contractual expertise within the office. I do think that has suffered but more basically, you either have to call up one of the other contractors or go up to the front office and discuss it with someone. You can't have it both ways from a professional side, we have suffered somewhat. Also the functional side has lost some of that power because a three letter is just someone making recommendations to the program side and can't really take a stand as much as they used to. They're still relied upon for information. - Schedule is definitely helped by this structure, things are done a lot more timely. It would be easier to solve problems with the team all sitting together. The functional expertise is there, it's just a lot tougher to get at, a lot of times they are just by-passed since we're all in the mode of program. The risk there, you give up some of your identity, you are paid to keep everybody legally sufficient and work with the contracting officer who signs the contract. And a lot of the times you get in the mode of thinking "we got to get this done", and start thinking like the project manager thinks, maybe at the expense of performing the functional job the way you normally would have. Hopefully, you should still make sure you comply legally. The people you sit with are the ones you think of as your team who you work for. Before, you kind of sat with blinders on and didn't care if you disagreed with the program managers, cause you knew contracting would support what you were doing - cause you were doing it right according to the contracting side. - I see it as taking more people since before, you'd have this pool of people and give it to the person who wasn't busy. It was more even-keeled; programs aren't even, there are times when you aren't busy and times that you are busy. Now when you are dedicated to a single program, your team leader resents your functional manager coming down and tasking you to do some new work that has nothing to do with your project because he sees you as his asset and his program is first and foremost; that the program is your first priority. The team does not like to share you with any other area even if I am not busy. There was one contracting officer who was there until two in

the morning right down the hall getting things out while I had almost nothing to do. I did go back through my contracting chain and offered to help but my team leader didn't like it - but said as long as it didn't interfere with my program. They have functional things that need to be done, and it's hard to allocate them when everyone is busy on their own project teams. I think it's frustrating, probably for the functional leaders. Now we work together, though sometimes I think it can go too far that way. There are a couple of instances where contractors people have probably done things that maybe they wouldn't have done in the old organization because now they're working for a program manager that has a lot of influence on their evaluation. They are more apt to make a decision they might not have under a contractor office.

6) I don't know. I can't see any. You either have to have it one way or the other. They may be able to alleviate some of it by setting up a system where you have close contact with your functional group, to have the loop more complete. Just sitting in a group with the other functionals together - a lot of information is passed through casual conversation, which doesn't happen now.

Interview #2

Functional Member, Project Matrix

One thing I've noticed is that the amount of foul language about the other people drops dramatically when they're sitting in the desk next to you.

1) What we have right now are two team leaders, one procurement and one supply plus a branch chief. The Branch chief officially is the one who does the rating for us. We have no established leadership out of tech. We are orphans here, though if we have a question of any sort we go down to ask and get answers. We basically use tech ops as a consulting service right now. That would be the way I describe it. If I have a metallurgical question I see the metallurgist, or a welding specialist. One is a supply type, and there are two other item managers under her, one is a procurement type and has six or seven other buyers under her, and in theory we should have two clerks and one procurement assistant. The technician is kind of floating around as a consultant/advisor in their own sense. The majority of the people in this division were recruited on laterals. We turned in an I.O.M. saying we'd like to be considered. The Commander interviewed the people, all personally and chose who he thought. Some people were promoted into their slots. To the best of my knowledge all the team leaders 12(s) were promoted in. The branch chiefs, one came off a stopper list, and one was promoted into a temporary slot officially. - Correct - it's strictly local. The branch chiefs of the teams do the evaluation based on what feedback they get from the team leaders.

2) Pretty much so. I personally think this is eventually the way to go. Right now, the way it is, is we have engineers with plenty of education and experience wasting their time doing management work. That is not their specialty,. They don't teach that in most engineering schools and they're wasting anywhere between 30 to 70% of their time as compared to what they should be doing in engineering. We should get them out of it, they're in these high grades in management solely to justify the pay to keep them here. If they can even uncouple that and make them an entity or office that is consulting to anyone who has an engineering question, they would be happier as people, as individuals go. And it would free up the equipment specialists and others for promotion potential and let them have it. - Well as much as down the hall, the work comes from the functional area, from whoever drops it in our box. The thing I've noticed as a major benefit here is that about 50% of the time someone will come and ask "I've got a quick question", I look at it and say yes it's quick - here's the answer. Bingo - answer it, it's gone. I don't see it again. As compared to having it sent through the mail and

sitting on my desk a week or so until I bother to answer this stupid thing. I fill out the paper work and ship it back. About 50% are taken care of "Right Now". The other 50%, I've got to do some digging, I say write it up and put it in my box officially/formally. I would say about 90% of my work comes from my team. I have 10% that is miscellaneous. It may come from another team if I'm covering for another technician. It might come from the [functional] group. It so happens that all of the equipment specialists down here are eleven's. So we are senior equipment specialists. We all had some expertise prior to coming down here. As an example for myself, I was "the specialist on fencing", all sort of passive security systems. Even though its been a year and a half since I left the functional staff if they have a question about fencing, hey they call me. I was on a committee for nine years - I wrote some of the specs and standards. This division was still something of a test. So they put out a request and eight people applied and the commander picked the four he wanted. Three of us came out of our functional area, one came out of standardization. - No in that sense, he could be considered the weak link. He wasn't used to the day-to-day work, but by doing standardization type functions he knew a lot of things the three of us were never really exposed to and routine day-to-day work was real easy for him to pick up on. So he was a wee bit slow, but picked up real quick. So we're all pretty much up to the same speed now.

- They come from anywhere on the team. Its predominantly buyers, since they are the ones who generate the most work. Anyone who has a problem "drops it on my desk". In the sense, its not as structured as down in the functional area where they have to divide it out among 6, 7, 10 equipment specialists and engineer types. You're the only one so everyone knows to give it to you. I am the ultimate coin tosser.

3) Wide! We have the standard problem that all DLAs have the activities of legal decision versus actual decision. In that the buyer is the one with the warrant and has the ultimate say, as far as obligating the government. But of course any buyer who is stupid enough to go against the recommendation of the equipment specialists or whoever is just asking for trouble. And they know it. There have been times over my career that I've refused to sign papers but I disagreed with someone higher up but that's all a question of specific details of that problem. Yes, I have rather wide latitude down here because we are not in a formal chain of command and we're not stovepiped in that someone automatically has to review things. - Usually not. I would say only 1% is reviewed and that's what I have sent down the hall for help. It varies around. As an example, if a buyer has a problem and its something out of his/her normal scope its not uncommon for someone to call a quickie bull session.

And anyone who wants to can throw in their 2 cents worth. It's usually not the entire team, and it's not formal by any stretch. It's more a case of leaning over and saying "hey have you ever come across this problem?", or "What do you know about this contractor. Is this contractor a safe one to do business with?" Or "if there is an engineering problem, what affect will it have on my price and delivery?" Then I'll get pulled into that team. It's very informal, but there is quite a lot of group work efforts. That's one advantage I see with this type of structure, because the buyer might be talking to a contractor realize that we may only need - say 50 of these units, but if we buy 100, it is going to give big dividends as far as price and quickness of delivery, since it is an equitable production run. Instead of having to go through all sorts of rigamaroll paperwork basically they just yell down a couple of desks to the item manager and say "hey do you want to compute that - can we scratch it out?" There are some big advantages to the informality, to do without all the idiot paperwork; the savings is predominantly time. The problem we have is the number of stock classes we manage is an incredible number. Having been here via longevity, I have worked on over 30 different stock classes so I have a relatively well-rounded idea. But there are about 30 to 40 stock classes I have never worked on at all. In some cases, a specific example would be valves, I've never worked on valves before, but I do know they're critical. The type of valves we are buying often are a navy valve and if they don't work right, a ship sinks. One of the other equipment specialists, the one on team B, has worked valves for 5 or 6 years. So when I get a stinking little valve problem, I trot on over and ask him. Now in return, if he gets hit with a question on water purification or on fencing, he comes trotting over and sees me. The formal meetings are more a case of a person on high passing information out. We don't have a formal meeting for the sake of exchanging information between us. We do not attend any of the meetings at our functional branch or things like that down there, we've never been asked for it. We do attend the division staff meeting here at the teams once a week as the odd ball equipment specialist representative. - That depends on the dollar value. Small procurements will probably be the GS-9 buyer on the team. If it's higher it goes higher depending on their warrant. Often the lower person will do the work and make the recommendation on these but the official signature and approval is at a higher level. - Yes - from my experience and what I've seen - yes!

4) When we first got going we had an advantage and disadvantage at the same time. When the first commander recruited us, procedurally it is a lot easier dealing with lateral moves than promotions. So he found it a lot easier to get the working force, equipment specialists, buyer, and

item managers on board. We were already moving by the time he could interview and select his team leaders and branch chiefs, so they came on board anywhere from 1 to 4 months later, structuring from the bottom up. By that time we already had our working methods set in place, and now we had management imposed upon us to figure out what the blazes we're doing here 'cause they didn't know any more than we did, they have their own ideas and we were already doing the work. We had to do the work and train the managers as far as management goes, which got kind of hairy in several situations. We, unlike most start-up entities, instead of gradually getting workload in, it was dumped onto us.

5) As far as getting the paperwork moving and flowing, yes that worked out very well. The problem was later when management came into place and decided to impose their rule upon us. The peasants revolted. Let me see how to phrase this diplomatically. I wish there had been it would have made a lot of difference to a lot of people had we known who the supervision was before we came down there as far as what team you requested to be on. Everyone is very conscious of what their rating is because of consideration for promotion or retention. Your rating has a bearing on your RIF number. So getting some say, as to who is your supervisor would have had a major impact. Unlike a normal promotion situation or a normal lateral move where you know who your supervisor is going to be and have the option to turn it down, here we were already in the slot when BAM! we had management imposed on us which I did not think that much of. We have one branch chief who came off a stopper list - he used to work contracts that were multi-million dollar monstrosities, and is having a hard time dealing with us buying just piece parts that are at most a couple of dollars a piece. The other one has moved around the countryside so much that getting her trained as to how we do our buying here has been a real interesting process. She knows policy and procedures but not the way DLA interprets it. That has made life rather interesting. We have had 3 division chiefs in the last year and a half. So we have not had stability at the top. So this poor division, the workers almost feel that its an us verses them situation. We have been a new entity, there has been a lot of remorse and recriminations about us from other areas. Certain people have done their best to put up road blocks, others have cooperated tremendously but we've had our fair share of road blocks, and some were deliberate to try and make sure our division failed. It is more effective than what we had before; it is more efficient. I do not know the exact figures but the feel I have is that the administrative lead time is slowly but surely dropping. We've been with each other now long enough to be used to each others working methods...Who's good at what. There are some distinct advantages, there are some disadvantages too but most of those are personally

conflicts that you're going to have anywhere. There are more advantages than disadvantages I see with this, assuming we would impose this across - is what do you do with middle managers - you don't need them anymore. Yet they're the ones given responsibility for implementing this high demand type structure on all the workers, yet they're the ones getting out. It's a real psychological problem there. The 12's that are team leaders are not really middle managers. They were truly cream of the crop, picked by the commander. They have regular talks along with management of the team. They are still doing some work so they keep in contact with the problems some of the individuals might be having on the floor, but by being a team leader they are in contact with what is happening at the division level. So in that sense, they are productive, and informed of procedural problems and all else from the division. The 2 branch chiefs sit there, they fill in for the division head trying to get all the meetings that they're supposed to attend ... all the supply and procurement meetings they're stuck at. One of the branch chiefs said the entire 1st year they were here they signed off on 6 folders that was it. If we have good acrimony with other divisions there's not much need for them. We have the two 13's who are there structurally to support the 14 at the division level. I have a bit of heartburn with the fact that you got to have 'x' number of people subordinate to another to support a position. I think that's a crock, even when it is not necessary. We could have [the branch chiefs] gone and be done with it.

6) Immediately, we have had problems here with performance appraisals and the two branch chiefs did performance appraisals. They really could not see what was being done by the workers on the teams. I think they should have given the performance appraisal responsibility and authority down to the two team leaders for them to agree upon. It would be, a lot of the problems the division has is the way we interface with other offices, divisions, and directorates, because we're such a strange animal here it creates all sorts of problems. If someone was looking at this type of concept across the board I think a lot of the problems would go away once people worked out new policies and procedures.

The advantage we have is the ability of quick problem solving of simple problems. The disadvantage we have is the possibility that a system for a solution in one areas will not be spread about to all the other teams in other divisions and directorates. The advantage of a stove-pipe is that everyone follows the same policies and procedures-- which is also the disadvantage of a stove-pipe organization. I see the team concept as the way to go if we're allowed to go that way.

Interview #3

Functional Member, Project Matrix

1) I can tell you what the official line is to be. The functional manager is responsible for training, equipping, and the team manager is to run the program. But that's not how it's worked out. They've (functional managers) taken on more direction for the teams. In a true team they're not supposed to task functional members, but in our situation they are, and I think sometimes they need to. There are a lot of tasks that need to be done that aren't necessarily given to the teams to do. They are not part of the team's mission, yet they still need to be done and we haven't allowed for those kinds of things to be managed. As far as I know, technical requirements are not the team's function. For design that's how you build to the requirement, I'm not sure since that's not an area I'm intimately involved in, that's just you tell me what you want, and I'll try and get it. Whether there's a conflict there between the engineering community and the program management community I can't really know.

2) Not mine particularly, but I do see that from some of the other functional areas and there's real uncertainty. Right now the functional leaders are still doing the evaluation so when your functional comes in and says "I want you to do this task for me" it's yes sir, I'd be happy to do this. I don't know if that would be different if the team leader was doing the evaluation. Right now the loyalties are pretty split. I believe that's true throughout the group. The team leader gives input to the functional manager. There are a couple of areas like configuration manager, program management that report directly to the team leader so he does their evaluations. There is no other functional evaluation done. I know in the case of contracting at the DOD level, Eleanor Spector is supposed to sign out some sort of directive - that in team situations, contracting people will always be evaluated by the functional leader. Of course contracting people are especially sensitive to that. Because sometimes our role is to be a thorn in somebody's side often telling people "hey you can't do this, or I don't think you should do this, or do this a different way". It's not very conducive to have that person do your evaluation. - No. We have tried to institute that kind of approach where functional managers have a task he tells the team leader and the team leader gives me the task. That is not how it is worked. I get tasking from both. I personally have been very fortunate that my functional lead is very willing to listen if I have a conflict. I know some other functional areas don't. Also in my area I'm shopped to a tiger team at the same time. I really have 3 bosses. And I get tasking from all 3 of them. I have been able to juggle that but not everybody has been

as fortunate as I have. But that's definitely a problem. Like when I take leave, I'm really not sure who to go to, to turn in a leave slip. I know who signs my time card, but sometimes if they're not here I feel like I have an obligation to go around to each of those 3 people and say I have a leave slip signed for tomorrow and I won't be here.

- The team. We have SPO goals, 3 letters goals, we have team goals. For the whole, the SPO leadership does although they do come back through the teams to get some input but my feeling is that it's pretty cosmetic. Well, it really comes from both. Just today I got a tasking from my functional leader to give inputs to the goals, but I also get the same thing from the team. It's like doing the same work twice. Right now, the way it is set up in our particular SPO, the SPO leadership goes to both the team leaders and functionals. When they have a staff meeting, they have all the functional leaders and the team leaders and they are given the same tasks. So I'm going to have 2 people coming to me for input. I'm doing a lot of duplicate work. But you have to realize my answer to the functional leader may be entirely different than to my team leader.

3) That's one of the problems in our team, especially with the logistics folks. It's well what about supportability and the answer is I'll worry about supportability later. I think we've been fortunate because our SPO director is from AFLC. He's interested in supportability and really hasn't let it be slighted. He's been real adamant about considering those types of things. - It's hard to quantify or qualify that. I think the reason is that my functional leader is fairly new and doesn't have a lot of experience in contracting. So sometimes he'll ask for a lot of input, and even adopt it sometimes. The team leader does the same since his area of expertise is not in contracting. I feel that I have a lot of latitude in that area. Lots of times in our team, we will have 2 or 3 people here working on a particular problem. One of the problems is that there isn't a lot of communication back to the larger group, again there can be a bit of duplication working some of the same tasks. For instance, on the particular project I'm working on, there are several products, we've just released an RFP and we have several informal product teams within the actual team. As the contracting person on this particular team I can give input to each of the small teams but sometimes in the common areas there is a little overlap. It's difficult, but I don't think project teams are the reason it's difficult, I think it's just difficult in any organization to have communication be very effective. - I sit with the project team - that's a problem. It's a problem in my area because I feel like there's so much to know that as a contract-type I can't possibly know it all. I really depended on the other contract-types around me to give me some help and input on different problems. When I was

sitting there, all I needed to do was turn around in my chair and say "hey, has this ever happened to you?"; or "what did you do?; did you ever experience this." Now it's a real effort, I have to go find that person, he may not be "that" person where ordinarily I could turn around and the person in the next chair may say I know about that. I think we're really going to be in trouble if we ever start hiring again, and have to try to train people. Those people coming in are just going to be lost. So much of the training is done by sitting next to another person. It's really just a cross flow of information, and the teams don't have that. I think it's a real detriment. I think there has to be a way we can combine both of those approaches, maybe it's smaller teams. In this SPO, the program is not so large that even if we sat in functional areas that we would be that far removed. I really like the idea of teams and meeting as a group, talking things over as a group then I get a better idea of what going on in the program and how my piece fits into the whole. When we were by ourselves in another building, it took me a much larger time to get up to speed. We were in a large office of 30-40 people and all I ever saw was this little tiny part of what I was doing. I had no idea of what was going on out here. Even though the way I learned was from the people sitting around me and hearing others talk about their parts, there has got to be a way to integrate that to get the best of both worlds, but I haven't come up with that yet. One of the things I've thought about is using our computers more. If I'm not sitting in a functional area, how would I get the information I needed to know. One of the things we're using in this particular project is award fees. I've never done award fees before, and not many other people have. It was so difficult to find even people that knew they didn't know. If there were some way to use the computer to say I'm in this area and I have a problem with so and so. If anyone has any input please give me a call. It's just a way to get information back. At least it might be one more way to keep in touch with what's going on in the functional area. We have a functional staff meeting every week, but that's more primarily just to hand out information it's not to discuss problems. Most of the problems are spur of the moment, and I need to know now, not next Thursday. In the teams, it is made more by the leader. In the functional area, it's made more by the group. I have no idea if that's a function of the way it's set up or by personalities.

4) Very low. In relation to the teaming concept. I think I feel more satisfaction than most people do. My supervisors, I would say that they probably feel less than I do. The project leaders think it's just the greatest thing since sliced bread. He's really feeling his oats in this. He's in control, and all those other sorts of power things. To the detriment of the functional, yes. There's a concern

with grade structure. Especially with the person right above me that one of their functions is to supervise people, well he doesn't have anyone left to really supervise anymore. I know that's a big concern in all the areas, the 13's don't have a reason for being in the team environment. I think they have a real important reason because those are the folks I go to, to support me to feel more confident about things I don't know about.

5) I think it can be if there was just some way to integrate this bank of knowledge we all need, to access that. I don't have a problem with teams, in fact I like it. I like knowing more about what's going on with the whole project. I think because I have quite a bit of experience, that I can feel pretty comfortable in this position. But, I can sure see if you didn't have that you would be in a mess. You can not go into teams without experience. I think there has got to be some in the long run. Because we should get a better product. But it's going to be real hard to quantify.

6) I think we need to go back and look at what the job of the functional group are. Maybe the answers aren't here yet. Maybe there's some sort of hybrid organization. We've got this teaming concept, but it's still the same organization and we're going to flow it down when they should be flowing up. We came up with the idea of instead of management saying who would be the best for the job why don't you solicit the team members to see who they think would do the best job. I think we need to stop thinking along the functional lines if we really want to use teams and choose who is best for the job not by functional categories. Each person may wear two or three hats sometimes.

Interview #4

Functional Manager, Project Matrix

1) The team concept takes more people to effectively man. The team process has all these folks lock stock and barrel belonging to the project manager. Although the theory behind it was that they can't work any other programs, in actuality, they have to cover more than 1 area at a time, they're forced to. Here they try to basically keep all the folks working under the team leader and not working other programs. Because of the requirements for more manning they end up doing without some of the functional managers here - (which I have to qualify, there are some differences between an I.P.T. in a major SPO and team in a basket SPO. Obviously a major SPO and a team - like in the F-22 where you have logistics, since that's what I'm most familiar with they'll have a logistics team, and the logistics team will change in size. Here if you're lucky, with the I.P.T. set-up you'll have 1 functional person to cover an area. Some problems I see with it is where there is a manpower shortage, as there is on all our I.P.T.'s here, you have to have other people who are not functionally trained work in the functional areas. If you're doing without a configuration manager, you have to have someone like a logistician or someone work those configuration management issues. Guess what, they don't know zip about it. They may have a general idea, some more than others about what goes on in other functional areas, but you don't have the in-depth expertise - that history and experience of working programs, knowing what to look for, you're basically just out there trying to keep things rolling and hoping nothing falls apart on your watch. We have cases where engineers are doing tests, which is probably not the biggest crime that ever happened, and a lot of the engineers don't have the test experience. I know that one of my old employees was a high-energy individual that we put into the soft ATS program. Basically the program managers' needs were not logistics, his needs were immediate, "What's going to make me look good now; logistics is 5 years down the road". So he took the logistics manager we had specially picked because of the enormous amount of logistics work that needed to be done and they've got him working interface control documents, facilities, deployment, leaving logistics things to be done. Those are the kind of things we run into. Some of the other problems I see with the I.P.T.: If you're a team leader, or project manager you're number one interest is going to be your program because that is what your goal in life is. To make sure your program meets the performance requirements, stays on schedule and hopefully stays somewhere close to budgeted costs. In a functional matrix organization where you have functional division chiefs, those division chiefs, and those functional directors - they have a requirement to make sure those employees get functional development. But when

you're in a team, and short on people, the last thing on your program manager's mind is to make sure everybody gets their engineering training, or their logistics training, their configuration training and what have you, because basically that takes away from his goal, keeping people on the program to do thing that need to be done. - On the core teams, yes. We still have left side people from what was left over from the old functional organizations, where all the functional were co-located and then matrixed out to the product teams. They still have the responsibility of working with the "home office" and providing resources. You have X number of people slots dictated by the 3 star saying this is how many slots you have for the organization. The functional offices in the SPO gets their cut of it and they have to work with it. So it still goes back to the functional organization, but right now just about everybody in the functional organizations, with the exception of a few contract-types here, are out working for the teams.

2) If a team leader loses a function person, he will go back to the functional office and say this person is gone for whatever reason, I need a replacement. If a replacement is available he gets one, if not he'll have to cover the functional area with someone who is left from his core team. The team leader tells each person what they are supposed to do obviously. All the people out on I.P.T. receive their daily direction only from their team leader. The functional representatives - they really have very little contact with their people out on the programs. In a lot of cases here, I don't think they have any visibility into what's really going on out on the program. For example, when the functional division was busted up and reorganized on teams we had senior logisticians, journeymen and trainees all put out on teams, so you have some teams with very experienced people and others with people we were supposed to watch over and train and develop. Guess what, there's nobody out there now. Program managers don't take time to develop a trainee. They say, this is your job, go out and do it the best you can. Right now it's not working, knowing - what I know about the organization, if I were in that situation I would come back to my old directors and try to get help, but that's not what is happening. Everyone is TDY all the time, or hustling to keep up with tasks and must cover more than their functional areas. Time goes by and you just do what you can do. The training is not there. The development type work that middle management use to provide is not there either. That's another interesting subject. Not being able to buck all O.P.M., this organization as it was originally set up had the team leaders responsible for the ratings. The bad part about that is that if you're a team leader, how do you rack and stack an engineer against a logistician or against a contracts person. What's going to be your basis for evaluation. Generally when you're doing appraisals, you

have some standard which you compare people to, generally these people are performing similar types of jobs. When you're in a team as a team leader, each functional area is considerably different as to what they do. The program manager is not an expert in every area. He may have a breadth of knowledge across the functional areas but then again in the old system we hoped to provide very experienced people to each project area. There is no way for the program manager to do an equitable rack and stack. If you're a program manager do you rate the person who is most important to you on the team as the number 1 person. If you do that, in a lot of the cases obviously you would have engineers at the top since this is an engineering organization doing development work - primarily. I know as we go to IWSM, we're going to be doing more and more sustainment, but we're basically an engineering organization. Is your contracts person the one who tells you what you must do - is he the most important, is he the one you want to take care of? How do you make those decisions as a team leader? Under the old way of doing business when we matrixed people out the division chief of the functional organization would bring together the people and pow-wow and basically rack people who were doing primarily the same job according to experience how well they're taking their training needs, what their accomplishing on their programs. It's direct visibility by the people that know that job and know it intimately. You don't have that now. They made the decision here after saying that the team leader would be doing the ratings and fighting with personnel - "we're going to change the world", and finding out they couldn't change the world - are having to go back and guess what - the team leaders are not going to do the ratings. But they'll be providing inputs, which they always did, and the functional division chiefs will be doing the ratings again and working that out with the functional office. A lot of us knew that if they tried to do it any other way there would have been problems in the long run. You have another problem now since all the functional folks have been put out on I.P.T.s, some of them are not even in the same building any longer, how do you get visibility? The division chiefs that had that responsibility are no longer there. How do you get feedback and when you get feedback - obviously you're from the team - what kind of feedback are going to get? You're going to get feedback from a program manager whose specialty may not be engineering or logistics or contracting. You have to take that in stride and also have to make a determination as to what kind of task has this person been asked to do. He may be your best logistician but he's been working with the test group or contracting issues. That kind of muddies up the waters. You're having to make more guesses as to how people are doing. There's a chance to do some people a great injustice. It's really difficult. On an I.P.T. you're

going to do what your program manager tells you to. If he doesn't have a test guy and thinks you're the best he has for the job or the only guy he has for the job, you're going to do the test. In an I.P.T. organization people are going to become more generalists than specialists, because they're going to be working inside and outside of their specialty.

3) Well that's a TQM issue there, pushing decisions down to the lowest level. From my experience, it depends on how much the individual team leader wants to keep control of it. We've got some micro-managers and some macro-managers. We've got them at all levels of the organization including the I.P.T.s. As manpower gets shorter they are going to have to depend on the team more to make the decisions. The program manager will have enough of a work load - it's going to become more difficult for him to micro-manage business. For a general answer from me I would say that by in large, there is a fair amount of latitude provided to the people on the I.P.T.s now. I would say to a certain extent their group decision making is alive and well, within the I.P.T. Sometimes it expands too, for example in YTX when we have a team meeting we get the core team and the YTX functional specialists as well if the issue involves their functional area. If it goes beyond that pretty much the core teams are on their own.

4) I'm not sure that I can, I guess I would have to say the folks in this organization that have previously run the program management in the division, and the people directly working the programs they have always wanted this higher level of control of functional people, they probably like the greater level of control. I got to tell you for an absolute fact that most of the functional people, I would say 95% or more don't like the I.P.T. concept. They feel they've been set adrift by the home office, it's very uncomfortable for them working in other functional areas they aren't properly trained for. They don't have guidance, they don't have the middle management folks tasked with overseeing their decisions asking those functional questions they should be asking themselves but have missed and getting good feedback on their careers and doing those things they need to do progress. They also - in this organization where we've taken out the middle management, he's not here any longer, so what do the journeymen aspire to now. If they take away the middle management, you're not going to make a leap from a 12 to a 14, so that makes it more difficult, there's a lot less promotability - that weighs heavy on people's minds. Previously when we were more functionally oriented if you had a problem, if the program manager was taking the program in a way you knew was absolutely wrong, it was against all your principles as a logistics or a test manager, you could go back and say to your division chief what should I do here? And your division chief could go and

try to work together to fix the problem. A lot of that appears to be going away. Obviously if you're working for a team leader and you're out in your organization, you're risking life and limb to go and try to push him in another direction he does not want to take. It's a lot less likely for the functional person to intervene on decisions by the program manager. There's a lot of good and bad decisions made everyday and I believe there's a lot less opportunity for functional managers to correct bad decisions now.

5) I really don't feel I could give you a good overall picture of what's going on on all the I.P.T.s because I just don't have the insight into all the I.P.T.s on a daily basis. By in large one of the things I think is good about the organizational structure is the organization I work in right now. The program that got into line last did not have the best people on them. You built the best program you could with the talent you had. One of the neat things about the program development team (PDT) concept is that we have a lot of senior manager and a lot of experience, and having us work these projects together increases the likelihood that a good product is being put out consistently. You don't have the hit and miss of the old type functional organization. Whether the PDT will survive in this organization or not is up to question.

6) Right now with the way manpower is going, say we take another 10-15% cut, it's going to drive us back into an organization that's more efficient. From a functional standpoint, I think there is going to be a point in time logically that we basically go back to a matrix organization so that we can split up these functional managers across programs.

Interview #5

Functional Member, Project Matrix

1) For me and what I do the supply leader is my boss, she was the one that nurtured us and helped us with any problems we had. She had the expertise, as compared to our project team leader who does not know a lot of the supply things. Our project team leader deals mostly with the buyers and distributes the work load, determining who does what, and he answers all their procurement questions. Because the project team leader does not have the supply expertise we the supply people have to talk to a supply person.

2) There was no assigned daily tasks for us, the work we have is already broken down as to what we needed to do so it was not a case of her telling us what we needed to do. While on the project side, it's not that way when new work comes in they are told who has what work. Ours is already assigned by NSN and ORC. - Our branch chief, which is a 13. The way it worked was that the team leaders gave the branch chief input, but it was the branch chief that actually did the performance appraisal. The 13 is really our supervisor, but the team leaders are just team leaders. They could approve leave and offer guidance, but any major decisions were taken care of by the 13. Because the 13 basically didn't know what we were doing - she's away from us and didn't know - she had to rely on what they had to tell her. - They first decided on how many positions were available, then asked people to volunteer like a transfer from where I was to here on a team. Since the place I worked before was mostly ground support, I said that's what I wanted to work with since that was what I was most familiar with. The commanders decided who went where in the organization. Everyday we have to do requisitions from the customers that come in. We have to process those order point levels. I have a lot of interaction with the customers. They call in for status on their requisition and stock displacements. The customers call me directly not as a team member. They should never have to call the team for anything. The only way the project leaders would become involved is if I asked them a question. On our team they always told us that we want to hear about the problems, don't come to us with every little thing, come only with the real problems.

3) My supervisors don't have to know about any decision I make. The only thing they would know about is if I for some reason brought it to their attention. I can basically do what I want to do, what I feel is best. That's why I love my job, I get to make the decisions based on what I feel is right or wrong. As long as I can justify why I did it, it's ok. It does go through sign offs based upon dollar values. Anything I process over \$73,000 has to be signed off by my

functional supervisor, then anything over \$143,000 the 13 had to approve. There has never been any discussion of my recommendations. Lots of times we talk among ourselves on the team, to come up with the best decision. Say you have a problem a lot of times we would talk to the buyer and tell them we had a problem, this is what I want to do, do you think we can do it this way and they'll give us guidance; not using the whole team, it's just among 1 or 2 people, just the people who have those NSNs coded to them. That buyer, myself, and sometimes their project team leader, and sometimes the technician, I forgot about him.

4) Yes, I'm very satisfied, it's a great concept, and it really, really works. Like I said, everybody talks to everybody you can just go and sit down and talk about this [project] and what to do. It's not sending something through the mail and no hearing back, or waiting a long time. I don't really know what's going to happen when we reorganize. - On our team they do. So other teams may not feel the same way but our team is one of those rare teams where everyone works well together. Everybody is really cooperative and willing to go that extra mile to do what it takes to get the job done.

5) Very, very. This is just the feeling I have from working on the floor. Yes, [my superiors,] they think it's effective too. They're satisfied.

6) Only is we had more people, sometimes our workload is overwhelming. We just need more resources, more people, If we had the resources we could get a lot more done. There's more to do than we can get done every day.

Interview #6

Functional Member, Project Matrix

1) From the experience I have, I don't see real team leadership, not as far as a team concept and throwing ideas out to us to get feedback on. I see a glimmer there - of a possibility, but as long as we've been together, I haven't seen - any per se - type of role functioning toward something. Of course, this is maybe where our old supply ops team was a year ago. I see where things are meshing together, but it isn't maybe as fast as everybody expects it to be. That's natural - but, it's leaning more toward a team effort. I would say the old directorate controls the basic function, but we may deviate from it if we see a necessity to - but nothing has really arisen to dictate that we deviate very much so far. [Performance evaluations:] I guess you could say it's from the team, but it's from our own supervisor from our old directorate. There has been some attempt at input by the other members of the teams, but it's been very primitive. From what we're gathering this time, it's going to be each functional representative giving the evaluations, because we haven't intermeshed that much to form a team effort. There's been some team efforts in the teams out there at the 9 level, but as far as across the board, I haven't seen it yet.

2) It's assigned through the computer, through the assigned NIN ranges. We have elected team members to be our PAT team and they are working on the goals and objectives for our group. That's what I'm saying - there's a glimmer of more progressive things, but it's taking time. And with 3 directorates involved and this many people out there, you're going to have more holding back.

3) I make all the decisions except when it reaches certain thresholds, where I follow the functional's guidelines and it has to go to the next level. There is a subversive team in here too, because we have that old team from 0 that worked together, and we have a tendency to interchange ideas among ourselves as item managers and so, we're functioning as a team subversively. We accepted other people on our old team and so, we had the openness to bring people in. And it seems like there are those who are more receptive to a team-type orientation and we go to those people to ask them questions - across directorate-type thing - to basically form a team. And so, we're all interacting together and how it will all falls out, I don't know. Our first thought, within our old team members, was to try to separate ourselves from each other, because we knew we were more aware of how teams worked. And so we tried very hard not to make decisions. But we will go to our old members more so than go to other IMs for decisions. And from their teams - from their little groups, we've found people in there that

they like and so, because of that, then we all fan out to them too. So, maybe it's word of mouth spreading slowly. It has been easy for us workers to mesh, because we, as workers always did get along fine. And because of that, it was easy for us to just slip right in. Of course, you'll always have some who don't get along with anybody, but the majority of us did get along. And it's just finding more and more ways to cut back on these things that we've had to do - to form better teams. Eventually, with this new thing, this PAT team, I think that will help us more with changing ideas and attitudes. They're doing a lot work together. [The decisions,] They're not being overruled, but I think there needs to be more openness to the point of letting go of the old directorate. You know P and S had GS-11 monitors that oversaw the work of the 9s. And O didn't have that. And so, because of that, the O 11s are less involved with the 9s, where as the P and S 11s are more involved with the 9s. So, there's a little bit of conflict there -it will be interesting to see how it all works out in the wash.

4) I've been through a lot of what the group's going through and I have to stop and make myself realize this group is infant. And they're going to be going through what we went through originally. And I'm impatient that they don't want to let go of things from their directorates. You know, we are a test group, so - let's test! But they have tendency to want to keep within lines somewhat. Others out there -I see a lot of curiosity about what's going to happen and I don't see too much negativeness - you know I see some, but not what other people might portray. If you listen to one person, you might hear a lot, but then another person says, "well, I'm kind of open to this and this is kind of fun and I'm enjoying myself". Overall, I think everybody is anticipating and excited about it. Supervision is kind of apprehensive, which is normal. It's hard for them to learn this new role. And this is something we had trouble with on our former team, when the supervisors realized that there was going to be different role for them, but that we still needed them. It was hard for them to comprehend. And if I was sitting there in that position, I'd be scared too. But, of the 3 12s out here, there's a couple that are more for it than the other one - but eventually I'll think they'll all come around and I think they'll understand more what we're trying to accomplish. And the same with the team leader, I think he has just a little bit more basic experience with what all can happen and how it all happens - because you don't really know until you do it. He's often very confused about what we do at times.

5) Yes, I think it'll be great - I'm all for it. I've been for it for quite a few years. And the more we intermesh, the better off we'll be. I think there's a lot of stuff we can cut completely out of the system - save on paperwork,

time spent. And the looser we get, so that we can trust each other, the easier it will become. Disadvantages - maybe that there may be fewer jobs. I could see where down the line, you could maybe have 2 people instead of 3 working a NIN range. So, I could see where you could cut down on personnel. And as far as cross-training so that 1 person would do all three functions, that would be too much. When you think about one person taking all of procurement's courses and O's courses and then all the electrical and engineering classes, it's just awesome. So, I don't know how they could intermesh it. Another disadvantage is that there's so much to learn from each other right now -it might be better down the road. But there's so many rules and regulations in each directorate and trying to intermesh them is difficult.

6) More training to all the personnel in TQM. And more openness between each group so that more things are spread out. Now that's something else that this new PAT team is working on, to spread the word about each group and how they're doing things.

Interview #7

Functional Member, Project Matrix

- 1) Actually I'm assigned to work with everybody in the room. The team controls most everything - we get some directions from P, but mostly, we decide in here, internally. I get input from my supervisor, who came from the technical function and the procurement supervisor (his functional leader). They're both going to give us our evaluations. My supervisor, he doesn't see any of my work, he signs off on my leave slips. We haven't had our evaluations yet - I think we get those today. He doesn't see that much of my work. - Making sure we get all the announcements and that sort of thing. I'll go to him if I have a technical question and that's about the only time. My functional leader has more power over me.
- 2) I get work from various IMs all over DT. They are assigned by my functional leader based on workload and based on dollars. The 9s basically do small buys and I mostly work high dollar buys - RFPs (Requests for Proposals). I basically work with all the IMs in the room at one time or another. It's almost like a team. We don't really have team goals so far.
- 3) Most of them stand pretty much - 50/50. [Group decisions:] No, I haven't seen that too much. Well, small committees - like we'll discuss a PR and we'll get an O person, an S person and a P person and we'll talk about it - we do that pretty much. The teams at the 9 level work together a lot - like if the buyer has a question, they just turn around and ask the technician or the IM. It works out real well.
- 4) I like it. It makes my job a lot easier, because everybody is right here. You know, you don't have to call them on the phone or send a form - you just walk over and talk to them and get an instant answer - almost. As far as other people go, I don't know how satisfied they are. The IMs, I don't know how happy they are - I'd think they'd like it too, because they can get answers easier and faster. But from my point of view, it's worked out great. [Superiors:] I don't know if they like how the evaluation process goes, because they have to sit-in on the evaluations with the other supervisors when someone from their functional area is being evaluated. It makes that a little bit harder. I would think from a work point of view, as far as getting the work done, they'd like it.
- 5) I think so - highly effective. The advantages are that everyone is right here, so you don't have to get on the phone or send a form or wait 2 or 3 or 4 days, you just walk over and ask them a question. And then everybody kind of

has an understanding of what everybody else is doing. It's been a big help.

6) Well, just minor stuff - like new furniture, but that has nothing to do with the matrix concept. As far as the concept itself goes, I can't think of any changes. You don't even notice it because it's all administrative. And if I have any questions, I just walk over to Ann and that's real easy. She's basically my supervisor, at least that's the way I see it. - Like that team's overage, production and all that? I don't know, they haven't really discussed it - it's been pretty much a DT goal, we haven't really had a section goal. Now here's a change that I think we should do. I think we should have Post-award in here - we don't have everybody in here that we could have in here - that we need. I think that would be a big help. And then all the quality people aren't here, just the one person and I think we should have all of them. We only have one for the whole area. That's the two big things - get post-awards and all the quality people in here. - We could use one of them too [packaging specialist], so we wouldn't have to go out to anybody. Not so much Q, because he's the pre-award person and the rest of them are post-awards. But if he's not here - like on vacation or something, then we have to go out. So, there are three or four of them altogether and I think they should all be here.

Interview #8

Team Member, Functional Matrix

1) My team leader assigns them, yes. She assigns them all. She would be considered my supervisor in another organization and I still consider her my supervisor. When we came here, they said it would be the inputs of the team leaders, but it seems that the branch chiefs are not using the inputs. These last ones my team leaders had no input and we were told to pull them all back. The only person who had input on mine in the end was my team leader. The branch chief doesn't even see my work. The work flows to me from the team leader, and flows back up through the team leader.

2) The team leader is supposed to, but when it comes right down to it the branch chief does. I never elevate anything to him because he can't answer it anyway. The branch chief wouldn't let her have any input. He did his thing without any direct supervision of me. Without us having any standards on top of that. That's why they had to pull them all back. They thought they could run things down here any way they wanted - they found out they could not. They picked on the wrong people to do the wrong things to.

3) We have to because we have guys above us who don't know what they're doing around here. I have got my books and go by them. You can't tell me, they have come down and told me to change this, and I asked if they have gone through policy, there are rules you have to follow. Anyway, I wouldn't do it until they could show it to me in writing. I keep telling them you have to know what you're signing for. You have a FAR. set by law with guidelines telling us what we are supposed to do. If you have DLA or the IG come in they want to know why you did this, as long as you go by the books there is no problem, it's documented why you made the decision. - We all more or less gather. If something comes up that you need, you can tell them which book to find it in. If we make a change, we don't do it. Well, their work doesn't really have anything to do with procurement, they don't really get involved. If it's something like implementing a long term contract, we all sat down and decided who was going to what part. You know what you have to do with the file when you get it and that's all. Sometimes, there have been a couple of things when I've said show it to me in the book and they haven't read it right. He reads along, and I point out he didn't read the rest of it. I say you just don't read the top part, you have to read the whole thing that applies to the clause. He would back off. I've asked them what are they here for, they can't answer our questions, what are they here for? We don't need them.

4) When we first came down here I think it was good because we had a good person over us, and we didn't have these middle managers in here like we do now. I think everybody is just . . . none! If you talk to them on a one to one basis, it would be none. They just don't care anymore. When we came here we were all gung-ho, get these items, and get them to the customer as fast as we can. We really worked our butts off even with long term contracts. With the managers they have now, they really didn't know their jobs when they walked in here. They're no help to us. I think they did more harm than to help us. When I first came here, everyone really worked together as a family and now it's not. Nobody works together. I am satisfied with my team. It is a great concept, and we just help one another. With the new 13's in here we just don't get that now. - I think so, our technician is one of the best. He tries, he has a great turn around he doesn't leave our stuff for 3 or 4 days. We like our technician. The concept would have been a really good concept if you didn't have the useless middle/branch chiefs.

5) This set-up should not be under supply at all. Supply doesn't sign anything, they have no warrants. There are only 3 supply specialists with 12 contracts people on each team.

Interview #9

Team Member, Functional Matrix

1) The way I see it, I only have one boss and that happens to be my functional boss. - It is considered a team, that's true, however those in contracts and I also think - in program control, which is now called financial management, are part of the team. And we are broken out - like from the engine side of the house, we are broken out - development, support, and training. And there are certain lead team members from the engine lead team who make up the development, support, and training - however, that figurehead doesn't necessarily do our ratings. - Yes, contracting, and financial management sit with their own people, they do not sit as part of the team. Logistics people sit with the team. Configuration managers sit with the team and did that here recently. We have one configuration data manager, the one person for engines that just moved in to sit with the engine group. Until he retired, we did have - like my immediate supervisor did sit up with the engine lead team and he has retired and we have not replaced him yet. I do not know if - when we replace, whether or not that person will go back and sit with the lead team or not. But still the rest of his people sit down here and a lot of times he would feed information about what's going on up there and like I said we all are in the same meetings. They all have a piece of the pie. It is kind of interesting, because when that's the part of - before General Fane left - when he was here, something that he had done. I mean they didn't call it a weapon system team a few years ago, but he believed in sitting everybody down, all his functionals together to find out the best way to do things. He didn't just rely upon financial management or contract or his engineers or the logistic type, he got them all together, because his philosophy was "by having you all here at the same time then I get a better feel on where there is a problem of doing it this way" and things.

2) That comes again directly from my supervisor or my contracting officer. Now there are meetings that are scheduled - like weekly staff meetings, that the three different teams will have and in that staff meeting you get - like a status of what's going on and things. And you get an idea from the engineers and the logistic types and things, you know what's coming up, what needs to be done. But so far as them saying to you, you need to go and do this, no, it is more like a teaming relationship and that's what it is. But as far as contracts is concerned, we don't get any direction, but we're not doing anything differently then we did when there was no such thing as a teaming relationship. You still have the program manager come down and talk to you - say "this is what I'd like to do, what do you think about it?" But in this situation you are all

meeting together, the program manager, the engineer, the financial management types - so you are all there together and he might say "well this is what I would like to do" and then you all sit there and discuss what's the best way to do it. But I don't see any difference, except for once everyone is together, rather than the program manager talking to the financial manager here and then he talks to his engineer this time and he talks to his contracting people this time. He [the project manager] doesn't affect what I do anymore than how would he have affected it if we were in "teams"! He is the one that defines the requirement and what they want to do, you know, "we are planning on modifying this and contracts or do you think we can what kind of problems are we going to fall into if I do it this way as opposed to that way?" But not on a day-to-day basis. We still had that interaction even if you weren't in a teaming. I work on the engines and however, even though I am personally assigned to the support and the training team for the engines, I actually work also on the development. The contracting people kind of take care of whatever needs to be done or taken care of and not only that; there is the air vehicle side and I am not assigned to any of the air vehicle teams. However, sometimes the air vehicle side will be too filled up - then I have to go and handle some of that stuff. - It is equal because they have what they call a weapon systems team and that is made up of all of the functional three letters and the Front Office Group.

3) As a contract negotiator, I have a very wide latitude however, I have to clarify this - that if I'm given some kind of direction, then I can say the way I think it will be. But I have to discuss it with the contracting officer, because he is the one who has the final say. A very wide latitude! I don't have to check in to make a decision like - what about doing it this way and things. - Yes, great support here! Depending on what it is, some things the final go ahead has to come from the general. But generally, before it gets to that point you've all sat down and you've discussed it, and then you present to the general your recommendation. - All of them, including the money people, contracting etc. From each one of the different functionals. - No, actually at my level, and depending on how important it is it might be a little higher - but generally at this level and you'll sit down and discuss "do I have money to do this"? Right here is your teams. And if you look you'll find no contracting people, nor will you find any money people except for in this situation here with the lead team - you'll find a representative from contracting. - Yes, there is an engine contract and the air vehicle contract. Air vehicle is set up the same way, you will not, except for at the major level of the air vehicle team - on the rest of the teams, you will not find any contracting personnel. - Again what you do is go over

here and take Noel Thompson here, long range what will happen is he works in conjunction with all of us there. Its kind of interesting because I used to work down at YZ. I used to tell the program managers there that it is better to have your contracting people right up from the beginning and then they can pave the way and say "no we can't do it that way, or we can do it that way, or no we need to or something else before the actual package is dropped off" and said "here this is what I need to have on contract". You can work out lots of things from the beginning - the sooner you got involved the less headaches.

4) Very satisfied with working here, this is the best office I've ever worked in. I would say the peers would say the same thing. Supervisors, they would say the same thing. I have enough contact with them. - I would be inclined to say that they do and one reason why is because they also have - and I'm speaking on for the engine side of the house because that's who I work with primarily - we have a very unique relationship the contracting. We just got a proposal in and because we are under this team arena, not only here in the government but at the contractors place, then this proposal that just came in. The government people who worked with their counterparts well enough to know - was sending in that proposal - I mean it's like no surprises. It used to be you'd get a proposal and say "what is this doing in here" - well they know it is going to be in there, they've actually worked with their counterpart. The government and the contractor both - together are responsible for keeping the cost down. The government and the contractor are both responsible if there is a problem with this design of the part - the contractor doesn't say - I mean the government doesn't say "contractor this is your problem". It is our problem, so they're working together in order to get the solution the best way, so there's less problems in the long run. That was just something that happened when the decision was made that we were going to be set up as team, not only the government but the contractor. That was something that was said that we should do and not only that but was something that was endorsed. I mean it was like, when General Fane said "this was what we were going to do", his thing was the blame was not on him or me, "the blame is on us".

5) Yes I do! You still, as a government, still have to make sure that we're not being "screwed". You don't want to be such buddy buddies that you forget what you're there for. But I believe, from looking at the way the people I have to work with on this program - believe me, they have not lost that sight, they still know this is what we want or this is what needs to be done and they'll work with them - and "no, I think I'm getting screwed there", they will say that.

They haven't lost sight of it yet. Thank God! I hope we never loose sight.

6) I can't think of any other way. I will say that it does take or has taken, you know - from when we started this to get to here, because you know when you were working under the old school, you know you blamed the contractor or you know you didn't work out a whole lot of things. It has taken everybody a while in order to reach that level of trust with your counterpart or even with your program manager - engineer. It has taken a while to build that, for him to see that you're not trying to keep them from doing what they want to do, that you're not a hindrance and you're really there to help them.

Interview #10

Functional Member, Functional Matrix

1) We have had a lot of conflict on the logistics side. Some say they haven't from their functionals and I think that part of the reason is that they don't understand their own roles. It seems that logistics has more of a conflict than the rest of them and I think the reason for that is we're already matrixed, but so are some of the engineers. I think it has to do with the type of management we have and still trying to maintain that power thing, when we really don't need it and it's not meant to be in IWSM, as I understand it. I don't think they've cut the management level they need to cut. Functional - I'm not sure what responsibilities he assumes; but the way I see it, he still tries to run on the old management type of directing employees directly. They don't want to give up their throne. When we first started teaming, they'd come back and give directions directly. And we'd explain that the program managers have us do this and that conflicts with it. This caused bad daily fights. Then, because I was the group leader in logistics at that time, I said "hey, you guys need to get together and work this out, because you're catching us in the middle and squeezing us". But this has gotten better, and part of it is the learning process and the functional is backing off some. But he's still tasking us directly sometimes with logistics tasks and that's not the way its supposed to be, its supposed to be a team task. [Performance evaluations] Group leader - and that varies too. This is a farce really - and to give you an example, the group leader will do my evaluation and other civilians and the captain's is done by a major on another team. [Program manager:] They all should have input. Mine goes through the 4-letter functional, then up to the 3-letter functional side. Now how they're going to integrate the team side, that's a real problem - I don't know. The program manager will be doing the other functional's appraisals directly (not sure about Engineering), but logistics wants their own little ball game again. I disagree with it myself and I'm not going to be nice about it. - Definitely, the team manager, because who knows better if you're performing what you're supposed to do? How can they evaluate me when they don't even know what I'm supposed to be doing? It's a real personal exception for me. I firmly believe the program manager should do all performance evaluations or designate someone else to write them with him or her helping - maybe the group leader. [Access to Senior level officials:] Both do, if you mean the 2-letter, but if I had to pick one, I'd say the team leader, because he has a weekly meeting with the 2-letter. I don't know what the functional does. (The program manager is in the Directorate). My team leader is my boss and the group leader is supposed make sure tasks are done - and is

supposed to be working projects also, not sitting acting like bosses, but it isn't working that way. When I was a group leader, we worked as a group and it wasn't apparent who was in charge. The group leader, under the IWSM concept, is supposed to be the most knowledgeable person, but it hasn't always worked that way. Excuse me, but it seems that when it is a military person, they're put in the position because of rank and not because they're the most knowledgeable person. They may not know anything about Acquisition, and they're trying to direct, like it was under the old way and it's not working the way IWSM is supposed to work. It doesn't require a major's position to be group leader, and I've been through three of them and none were acquisition smart and yet they were leading acquisition program for logistics. So for me, that takes away the whole idea of what IWSM and the teaming concept is all about. Tasking people to do different things and only telling you what they want you to know, without telling you about the whole program.

2) Yes, or the lead functional - group leader (within the project) - they're the ones who are going to give your day-to-day taskings in addition to the program manager (from the program manager, through the lead functional), but they come from both directions, which is OK as long as they go through the program manager first and then to the group leader.

3) If I was working the projects, I was told, it wasn't my decision to make, it was taken right out of the team's hands. You can't work that way, it's not the way IWSM is supposed to be. Even the group leader shouldn't be visible or stand out. To me, in teaming, you work in such a way that everybody sits down and just naturally works - which does happen in a lot of cases. But when you get...and again I think this has to do with structure in the military and power on the civilian side, if you come in and say "I'm a boss" or manager and your AFSC says you have to be one, naturally you're going to operate that way. And in our case, a 4-letter functional rates our major, and so, one of the things he said, is "well, I am doing your appraisal" and it was like a threat. But I think they're working to change that now, which is good, because if she didn't do what the functional wanted, then who's going to pay for it. And so, there's a lot of problems there. But getting back to your question about directing, we started out on a team. In logistics, for instance, we have 10 ILS elements and we broke them down and we assigned certain people to them. So a person is responsible for certain elements and is the manager of those elements (and these are GS-12s assigned as managers of these elements). And so, you're the lead on that project, or supposed to be - and when I said directed, you're not the lead - you're the lead only to a point when the group leader approves what you're doing. And that's not

what the group leader is supposed to do. If I can't handle my area, then I shouldn't have that job - we're supposed to be experts in our field. So, sometimes, people will decide they want someone else to handle it, who needs more experience - and this has happened to me - they yanked projects that I had worked from the word go, right out of my hands, assigned it to somebody else and told me I'm now the alternate. This was a functional who did this, because of the "good ol' boy network" - and this is a sore spot with me as you can tell and it's not going to go away. And the reason this happened is because he liked that other one and hated my guts. The team picked me to work on a tiger team ("team within a team") to be the focal point for that effort. Everything was working fine, and I came back to coordinate with the other members on their specific areas. Well, I was getting a lot of compliments on how I was handling it, and the next thing I know, the functional said, "you're not going to do that" and went ballistic when he saw my name on the team's roster, when it was being briefed by the program manager. He said "that's not who I want to see there, it's up to me to say who should be there". So they worked on it for a while and this is when he threatened the Major, and he said, "Well, it's like this, I want so and so to do this, I want him to have this experience. You handle it and I do write your ratings". And so I got shoved and I'm supposed to smile and like it. Logistics stinks for this, and the other areas - Engineers have some of the same problems. [Sets goals:] The team leader. I don't even think he has the full authority. I think I was a good trial case and I had a firm adversary on my side in the team leader. He was the one who hired me, even though I was assigned and matrixed to the functional from AL. The team leader was very happy with my work. - Yes [the team leader has the responsibility] and it's supposed to take priority over anything the functional does. [The functional interference:] Yes, plus he humiliated and embarrassed me and put the team in a bad position, because I was on this tiger team and something came up on phase 2A of our contract and other people are working another phase and people got to the point where they didn't know who to go to. And people don't know how to handle me because if they touch me, they might get into trouble. So it's very bad - not that the environment's that bad - but it's a bad position to be put into for the team members. In the SOW, we decided how we would structure it, we were empowered to decide if we needed certain things in the SOW - the team did a group scrub, decided the rules we were going to go by, how we were going to function. Our past team leader was great - the present one is just getting up to speed - we decided everything as a group. [Decisions:] The team, based on what the team wants, until it gets out of the team's control, when it has to go to higher levels and has to go through the functionals (the 2nd review). - Anything they

can to stick a clunker in it. It's a power struggle. They have us put things in the SOW that aren't really needed, in order to get things signed out. - Not really "little latitude", there's a lot of latitude while its at the group level, until it hits the functional. Part of the problem is because its AL. I thought when we merged, that AFSC and AFLC would have disbanded matrix office and made it one because they're not needed. But they won't do it because there's people's jobs. Our functional still supports 2 or 3 bosses too. He answers AL but he has to please these down here, so he has to maintain his power and justify his 14. And there really is no justification for it. The final decision will be made by the team leader - well, actually its a group decision when it leaves us. And each time it happens, it gets better. But I have a perception that the functionals don't know what their limits are. And they need to be put on a team themselves, or given a job, because I see it as they're trying to keep their hands in there and their power. And the team overall, and we're a strong team, we still get the majority of the things our way, as the team wants it. But if you give up fighting, and we're getting weak now (you get tired of fighting every day) - then things might be different.

4) Only speaking for conventional weapons, about 50% and I truly think that the reason is functional's buttinsky, because if you're going to treat people like they don't know what they're doing, what you get is low morale. But even at that, the team keeps up its own morale up well. My satisfaction was great until that incident. Everybody worked, and nobody was gouging or punching, but I can't say that's true now. Right now, I hate it, but I'm not going to leave it. I'm going to stay in there until people find out what they're right position is supposed to be. The way its working, I feel like I have to say "Mother may I?" before I can do anything anymore. [Empowerment:] No, and this is with the group leader, not within the team. The team empowers me and I don't have a problem it. I'm talking about the team leader person. And it all stems from the person being new and not knowing what teaming is supposed to be, because he came off the flight line, and really not knowing what's supposed to be going on, so they're listening to certain people who are gouging for the functional because they're the good ol' boy network. And its bad in AL and its hurting my career, and I don't plan to stand still for it. I've let that be known, so its no secret. But had the person been in on the team since the beginning, that probably would not be a problem. Before that, everything was working well, I was well-respected. I'm probably the most knowledgeable acquisition person in my group, but I feel like I have to say "mother may I". And if I don't, I feel like she's a functional mouthpiece and then the functional says "well I write your ratings and I want this

done. They haven't been caught up in the mess I'm in because they're part of the good ol' boy network, and I don't have a problem working with them. But they think the functional should butt out. They hate it. And it truly was working well before that. Our functional has a personality problem in that he has a male chauvinistic problem and he also has a problem with me. I didn't even know him, I've never worked with him, but he hates my guts because I'm an outspoken female. He'll say differently, but it's very obvious. They could take him out, put a different type of person in there and everything would work fine. But that isn't going to happen. And I understand the engineers have a problem with their functional. [Superior:] Team leader: the old one - very good, the new one is too new to know yet. And overall the team satisfaction is good. We'd all love it if we'd get rid of some of these every day constant conflicts. Some of them (managers) feel like they're being left out - we kept hearing, that they're not being kept in the loop, and that the team leader's job.

5) A major advantage is that each functional area talks to the others much more, so you're not working in a vacuum, so you have an integrated product. Another advantage is you're working so closely with people, they know what focus you take and they learn from one another and learn their perspective as far as the functional area. So that when you have an input into the product, you will keep that in mind while you're doing it. And for logistics, particularly, that has been a major problem in the past. When I was the group leader, I feel like I gained respect for the logistics as a whole, because of the way I handled it. I had enough knowledge and I didn't allow the engineers to spook me - I'd talk back to them and say "now wait a minute" and learned to talk to them. Even though it seems that a lot of people think of engineers as superior to logistics, I've beat that down a lot. Another thing, is that they emphasize training a lot, so you can get about any training you want - from the functional moneys and from the program. And within logistics, we have specialists, who have worked the various areas, like tech orders or LSA and the other people learn from us. And also, I learn from them. The cross feed breaks down a lot of fences. Logistics has 8 members, and I think that's too many for our program. Contracting has one buyer and a clerk. There's two configs and two part-time data people and program managers. Logistics, because of the way they're always been broken up, just has too many assets for the amount of work right now. But I would like for us to be sitting with that project team and represent logistics. And be pulled away from the logistics team, because that's the way it's supposed to work. We don't need 10 logistics people, we just need those 10 people to learn to work everything, so they can be put on team. But we're still doing it that way to maintain our power. I'd love to

• see it dissolve. But not to have access to others, well,
• you can always go to others. Even now, if I have a major
problem, I go to the staff and pull from their expertise.
And so you'd have your project team within your team, which
we have anyway. Right now there is a duplication of
efforts.

6) We should sit with the team. The functional managers
don't have enough to do. Perhaps there should be a team of
functional leaders

Interview #11

Team Leader, Project Matrix

1) I have to review every large solicitation pre- and post-award, and everything that goes out and then I do assign their work, ok leave, and other things a normal section chief would do. I also do the contract statements depending on dollar value. Their tasks, I really have no responsibility because they do have a team leader item manager on the team. We work side-by-side as a team. I have the same capabilities of allowing them to take leave and things of that nature. And if they need to elevate something I'll do my best to try to make sure the right people are needed to be aware. I really don't assign any of their NSNs, packages or anything of that nature. I have no control over that. I do question them quite a bit on items where we have plenty of stock on hand, the back-orders to me are not excessive and yet they may issue an urgency statement. I do question them on a lot of things.

[Performance evaluation:] That's another odd ball thing here. We have input on everyone on the team. We have input on all members, I have input on the item managers and my co-team leader has input on how my contractors are servicing her. But we don't actually do the evaluation. We give input to the branch chief and the branch chief compiles it. She and I do talk to each other. I'll tell her that a particular person is really strong here - or do you have anything about that. We talk about what we feel and where they're at and where they should be on their performance evaluation. Yet, the branch chief makes the determination, makes up the numbers, and even though we gave input, we're not even given the opportunity to see what these people are going to get, so in case we wanted to question any of it or we felt very strongly on one element. I was a little upset about the way it was handled. [The day-to-day work:] I have limited capabilities as far as helping to insure they get a good appraisal. - The branch chief. I was not asked about my co-leaders, and she had no input on mine about how we worked. As far as I knew it was just a straight line from the branch chief, without any member from the team being asked about my leadership capabilities or how they perceived me as a leader on the team. I think it was just straight from the branch chief deciding. - It has really not been defined here in this division because we are so unique. We're not sure exactly. It seems like one branch works differently from the other. One branch chief likes to be more of a micro-manager who wants total control and the other one is if "I don't hear any problems then everything is ok". We've had several people promoted so we've had a lot of turnover because of promotions, people who have been transferred out due to promotions, and people coming in to replace those people. - It was the branch chief. I was able to sit-in so that I did have an opportunity to give

some input on who they were selecting. I was not a selecting official. I had no say on who I was going to end up with. It was a courtesy for them to allow me to sit in. I don't know that it was a requirement. I even got to ask a couple of questions, that was kind of special since they were going to work for me. They did ask for my opinion. We have a technician on the team. He is one of our team members. I felt his evaluation was a little difficult for me because I am not sure of all his functions, I am not sure anyone knows everything he was suppose to be doing. So we evaluated him based on what we know and technically people do come to me with a problem if they are not getting the help they feel they should be getting from our technician on the team. Since we're not well versed in the technical area we have to rely on his expertise, if we feel strongly that we're not getting enough support then we do go to someone in the technical service area that also works those types of NSNs. - Well, we usually talk. That's the whole thing about a team is to communicate. If we still feel very strongly we may ask one of the technicians on another team what her opinion is. And depending on what they say, if the supply person is still unhappy with it, or the procurement person has questions then we'll evaluate it. Usually the branch or division will also get involved. - Personnel controls the number of people we have in the organization. The volume of work is just whatever our item managers on the teams generate. I think the whole concept of effectiveness is how we support the military customer. That should be the focus here at DCSC but it has never been. It's just we need more people - we do. In addition to doing everything else, it makes it cumbersome.

2) I tell myself I suppose. The branch will come up with little projects and things they want us to do, like go to the branch meeting once a week. They tell me where we are, and what they want us to do. I'm really kind of a go-between.

3) They're given quite a bit actually. I think that we encourage them to come up with ways that they feel we might be able to work better. And if they feel very strongly about a certain contract being awarded to a certain company they may not be so pleased with, we certainly would talk about it as a group and then I would elevate it up to the branch chief if we still couldn't come to a consensus but they are given a lot of latitude. They train younger employees, we have a wonderful relationship on our team. I feel no one feels that they even have a team leader because we don't want that feeling, we want to feel them that they're equals and that everything they do is important to the success of the team. - Usually we talk about it. Depending on the impact of the decision, we'll involve the whole team. We have experts in different areas and a lot of

times those experts can draw on a lot of experience they may have in another area, that the other person might not. They think if the team can decide on something and everyone is in agreement with that, it works much better. So that's exactly the way we do it on our team. We try to go with our experience. - Not usually, a lot of times they'll show they have proven me wrong. So I encourage them to challenge some of the things I think might work, because of their experience. Now I have to say if the team decides something and I really don't agree with it, sometimes if my branch chief doesn't think it's a good idea, we go with what the team wants. That has caused a lot of friction between myself and the branch chief. I'm sure that affects my performance appraisal but the work gets done. It's just an opinion, if I'm the team leader and I'm the one establishing something it's really just a difference of opinion. This is her wants, and this is what the team wants and it's going to work just as well. It's just a personality difference. - She has done that. It depends on the decision. She's my boss, she can do whatever she wants. If she does something I don't agree with, I will not sign the contract, she will be the contracting officer. She has overridden what the teams recommendations. - Yes, in some cases. Our whole organization is unusual, it's really unusual. I have to say that probably if you were comparing to a regular "buy shop" that it doesn't usually happen. In there, the branch chief goes with what the section decides. Because they perceive us as having high visibility, because everyone is trying to pattern the reorganization after ours, they are trying to be especially careful about what they do. Usually they override, usually. We've had several incidences, well one incidence in particular where we had been told we were to include a 200% option clause and we didn't have anything in writing from policy, they just said you will do this. So we ended up, in some cases the teams did do it. We tried not to if we didn't have to. Depending on how far it got up when the group came down to review our decisions that was one thing that was written up. The 200% was never something that was approved and should never have been included. - Yes, [conflict is normal.] Yes it is. I just think that within the team, they have a lot of experience in their areas, whereas, people in the upper-management area have no experience with the type of working environment, and type of work that we do. That's not their fault, it's just the way that the management was placed. We have a displaced employee, not familiar with our organization, and the other branch chief has only worked research and development. The deputy division leader was an instructor. So it's a lot different, it's just a power clash. I don't mind, if they can put something in writing, I'll do it. So I run into a lot of problems, we don't always do what we're told because it's up to us. If you can

give us an IOM, I'll do it but otherwise - not. It's turned into a lot of problems for me. I'm the incorrigible one.

4) I think the people love the concept, they love the team environment, working closely with them and being able to communicate and have input on how we do our jobs. - Different ways of doing things and improving the way we work. I think that they are a little disgruntled with having to do it all; they have to do the pre-award, and were very limited to the types of pre-award they did. In our organization they not only do the pre-award, they do the post-award, they also decided to take every NSN over 25,000 and make it a long term contract even though we have a whole separate section that does nothing but long term contracts at DCSC. That's caused friction right there. The pressure is a lot on these people now because I guess the requirements contracting buyers are only required to do 12 per year where we have 25-30 plus regular work, small and large and post-award work. I think it's just too much for them to handle. They're now dissatisfied because of that. I don't think they're happy campers anymore. I think it's extremely difficult. It's hard to manage a desk, keep up a workload and produce and still be a section chief type where your advising and reviewing and assigning the work. It's really almost too much, it is too much as far as I'm concerned. There's just not enough hours in the day to do the job you want to do, that you feel are capable of doing, but you just don't have enough time to do it. I don't think the team leader is something any person could do well. It's just too much work. - I'm not sure, they don't tell us how they feel, there's not a lot of communication. I don't know how they feel. They do more ordering; "you shall do this; there's no excuse if you don't get it done; I want everything on there". They do that more. The workers are great, but once you get to the management they've lost it. They don't give the respect they deserve, have no concept of what work has to be done. If you went down and asked the members of the team, they would say they love it and that they don't want to leave the team and be separated. If you ask them about their jobs, they would say they're really frustrated. It's just a lot of work. We're doing it all. In addition we're doing more requirements than they ever did down the hall within each team.

5) I think because you have some of the best workers, I think we are effective. I think we do supply the parts to the customer faster because we not only do the pre-award, we do the post-award so we know who the bad contractors are. So we're in a better position that way. So as far as supplying the customer I feel we have done a wonderful job at that. As far as workload is concerned I honestly think we are not as effective because we don't have the manpower

needed to answer all of these requirements packages that they want us to put into place.

6) If we had more people to do the requirements contracts, that would improve the way we could get our job done. If they could get the other directorate to work with us it would certainly make our job easier. We have a lot of resistance from the other functional directorates and it's all because the original mini-ICP was the thing everyone cooperated with regardless. The general is not as interested as when we first started. I don't see how we can be more successful than we are now. Based on the number of employees we have and the workload we have and the pending organization.

Interview #12

Team Leader, Project Matrix

1) Well, it works different in here - he calls it a matrix type of supervision. As far as the expertise in the technical area, anyone in this room can come to me for technical advise, no matter who their supervisor is, under this matrix type of supervision. It sort of works that way - I'm still watching over the technical side of DT and I'm doing the administrative side of my section which includes some of the procurement people, some O people, and a Q person in addition to some S people. As I go along I'm getting more familiar with their processes, with their way of doing things, why they do it, how the decision-making is done - those type of things - I'm learning more and more. I had an overall knowledge of what they did, but not quite in the depth that I'm starting to learn now. I have got to learn a little more in depth of what they do, for the evaluation and that sort thing.

2) I have group leaders or monitors (GS-11s from the technical functional area), who take a big part in assigning work to the GS-9s from the technical functional area. Before we came into this area, I had this set up so that the work got passed out by these group leaders or program monitors - if I was out of the office - i.e. off on vacation or even in a meeting. In this way, nothing stops the work within the office. When we came into DT - we started working in NIN ranges. Before we came into DT, we assigned it according to workload and who had the lowest workload. Now, we're in groups and we assign according to the NIN range that the IM has in that group. So, now the NIN range itself drives the assignments. The high-dollar, high-value people do not work under the NIN range concept. They work the \$25K threshold and up. So those people, are driven more by workload. The stuff that comes through DPACS, I'll reassign that myself to an 11 in the technical group. It is controlled by the "formtrack system", which is a computer system to track this workload. Once it comes from the procurement person or the item manager to the technician, it will be tracked to find out who has the work product, how long it takes them to process it, what kind of delays they're having, or what kind of problems they're having. It is tracked by YPE and by NSN. Inside each group, if a P person or O person has a question, they'll automatically turn to the S person to ask questions or pass work products back and forth. So, inside this group (11s) it is working somewhat like this group (9s), except that the dollar value is different. And the S and P 11s are actually reviewing some of the work of the GS-9s. We, as the 12s give them, but the appraisals are still a little bit in the matrix area, where I, as the technical expert have a lot of input for the technical people. And the same goes for procurement

and the inventory management people. Even though I will sign all the 46s for people within my section, regardless of which functional area they are from, I will have input for the other expertise from the other functional areas. We will use each other's expertise in order to give the best performance appraisal we can. I'm the one who actually signs it. This has been discussed with Personnel as the best way to handle it and the legal way to do it. Since this is a test, and we're still trying to review areas where we can improve, I'm sure this is one of the areas that we want to really key it in on, to find the best way to handle performance appraisals. At this time, we feel it's best to approach this as a team when we actually give the performance appraisals. Some of the concerns from the people on the floor were - like how can they give me a performance appraisal when they don't even know what my job is. And some of the concerns of the supervisors were - how can I give them one when I don't know their job. So, the best thing we saw that we could do, was to combine the knowledge of both of the supervisors. [Goals] - We discussed this in the beginning and it came down to the commander looking at things in a broad sense rather than a short-sighted sense - i.e. a strictly functional viewpoint - S looking at S's mission, P looking at P's mission, etc. And he broadened that goal to where now, in DT, we're all trying to meet the same goal, which is customer service. He is looking at availability and ALT and total customer service. And then the goals were set by each individual group. In S, my goals are processing things in a timely manner, such as procurement support requests within 30 days. And I'm sure that Ann (P) is looking at ALT and PALT and getting awards out and Jim (O) is looking at backorders and availability. Plus, we've set up a quality group - the people have selected 6 representatives to be in this group to actually start looking at some of these areas: i.e. - what is the best - do we need 3 people in a group - what is the best number to have in a group; what are going to be our goals; performance appraisals; the way that we process things; the way we keep records; etc. It's looked at overall - quantitatively and qualitatively. We look at how many they get out but we also look at whether or not it has to come back for rework - in other words, we want to do it right the first time.

3) Before we got into DT, in S - we were under a test where we were cross-training to make the equipment specialist and the cataloger one person that could do the whole gambit - this was started in November, 1992. During the test, we started an experiment to determine - when someone made a decision, was how many times should it be checked? What I found out as a supervisor was - my basket was high, and I started checking to see how many times I actually made notes on the files and sent them back for rework. And it was very

seldom, so I thought I was adding very little value - so, I passed some of the work products out and gave them to the GS-11 to sign. In order to determine which ones to pass on, maybe dollar value had something to do with it, or whether or not it was correspondence that went off base. Anything I thought the supervisor should look at, I looked at. If you want quality, you have to get back down to the 9 level and get them trained correctly and once they get the process going and they know what to do, there's no reason to look at all of them. The 11 has quite a few work products to look at - because they are one step above the 9, where the quality is really important. I think they make good decisions - I've always felt that once they get to the 9 level, they've had a lot of training and classes and on-the-job training at a 4,5,7,9 level with a GS-11 sitting beside them. So, by the time they get to a 9, they should be able to make good decisions. And the only thing we've ever asked is this - if you get to the place where you're trying to make a decision and you don't feel comfortable with the decision, then ask someone - that's the best quality step you can make. I find people walking across the room to get information to help them make decisions - i.e. to ask for a source or to ask an opinion about a drawing from someone who has more experience or expertise. They're making group decisions on a daily basis. That's the key to what make DT works - that interaction between the O, P, and S person. They can turn around and ask "what will happen if I do this way", and the other can say "well, this will happen if you do that". And that's how DT works - with guidance, of course - but the decision-making that goes on there is what makes it work. For instance when we have problems with a certain NSN, we call in the person from O, S, and P, and Q if we need them, and we bring out all the different areas about this NSN that each person is working on and eventually, we'll come to a decision. Where before, that was nearly impossible. We'd have to call them up, find out when each person was available and when their supervisor would let them come, find a place to meet - get clear across base. And now you can just ask everyone to come in and talk about it.

4) Mine is high. When I first came to DESC, one of first thing I heard was, when something came over from P or O, was "I don't know what they mean by this - why don't they get us closer together so we can have a more personal way of getting these questions answered, without having to send this thing back to clarify it or to get them on the phone?" That was some 14 years ago and now it's a reality. I would say the concept of having these people in groups working - because they are the team players - the concept is high with me. I think it's the best way to go. Sure, it's a test, it's got some areas that need to be critiqued and need to be ironed out. Subordinates - from the technical people - I

think it's also high. Since we were already in a test and had seen some great progress, when we came in here, it was almost like accelerating that test to a higher level - and we were doing something that no one else at DESC was doing, and so it was high. Also, since the S people were already in this building and only moved about 100 feet and we weren't already in modular furniture, so staying in the old furniture did not affect us, it was less of a problem. We were up and running the same day - the systems were on, so we just continued on. The people from procurement had a little more inconvenience, they had to move upstairs, but I think they handled it fairly well - so, as far as I know, they're pretty high also. The people from O - it was a little more difficult - they had to come clear across the base, they came from modular furniture to this little room that wasn't as comfortable compared to what they came out of - there's not the privacy, and they left their friends in Building 1. This is just my personal opinion, but I think they had the lowest acceptance to DT - and I don't think it was the concept they had a problem with, it was just getting over the move. Now, I think their level has risen quite a bit. Over all DT - I think it's medium to high. I've heard some say - "I don't want to go back to what I was doing - this is the best way". [Peers:] Some are for it, some aren't comfortable with it, they don't know fully what we're doing. Some are a little bit afraid of it- if DT does work, and the general says this is the way to go, then how is this going to effect say - grade structure, personnel, the overall DESC outlook, etc? So, I'm sure some of them are a little apprehensive as to what DT is going to do or what it's going to turn out to be. But, from all I see, DT is working - there's a lot of positive things coming out of DT.

5) The biggest effect was the groups being able to interact, being able to talk face-to-face and being able to work these problems out. And another thing is that you don't have to go across directorates to get something accomplished. In most cases, once we decide, unless you have a very big dollar item - to where the signature level goes outside of DT - in most cases, everything is done inside of DT. Another thing that's happened - especially in technical, because we're sort of in the middle - we were called technical services and we provided service to the O and P people. And some of the things we used to do - we've been able to accomplish a lot faster. And we're able to cut down on the forms. Also, the technician, from the cradle-to-the-grave, works a product. In other words, when a new item comes through the door from the Armed Services for stock number assignment and the technician does the new item control, he reviews the product and sends it through the system, gets the NSN assigned and does the maintenance actions and cataloging actions. Then, it goes to the IM, who determines if a PR should be generated, and if it is,

then it goes to P and if everything is OK, it goes through the system. If everything is not OK, it'll come back to the technician and he'll review it again. So now with the way the forms are and the way this process works, the same technician handles that item all the way through and it stays in this room. Eventually, they won't even have to use some of the forms - i.e. the form 107 (unless it is a cancel-use, cancel-dup, which takes coordination with the ESA) - he can just input it into the computer, since he's a multi-functional technician. They're combining the Cataloger (SL - logistics data support), the equipment specialists (ST - technical services) and the procurement support people (STS - those who look at the recommended buy) and cross-training them all into each other. Here's something that's more like an uncomfortable feeling - than it is a disadvantage - but it is a little bit difficult being the direct supervisor over people from other functional areas - and I think the other two supervisors would tell you the same thing. Another one is that you feel like you're alone, because the way it was before, we had people we could lean on - you could go over to the next group and see how they were doing things. But now - you have no one to go to, you are it - you're the only one doing it. And another thing is sometimes you feel like no one else knows that you're even here - even though the general gets good reports of this and we're getting more PR out there - we're getting written up in certain bulletins. But in the beginning, it seemed like we weren't part of anything - you weren't part of S or P or O - you were separated. Of course, you could turn that around into an advantage and think well, we're on the cutting edge, we're doing something new.

6) I think some of the changes when we first came in... well, I'm starting to see some of that taking effect. When we first came in here, everyone was drafted to do this and no one had a choice about the concept - even DESC didn't have a choice, it was mandated by DLA that the centers look at some of these areas. But the changes we have in here are that we have set up the quality team and we have the DToids to improve processes. So the people are starting to see that some changes can happen. Improvements - I'd say just continue with what we're doing - get the people more involved, let them make a lot of decisions, because they're the ones that do the job and they know more about it than any of us. And I'm starting to see some improvements come about by people being able to have input. And then the next step, I would suggest is to continue to look at whether post-award should be in here or not. Would DT be better off if they were in here? Because the people out on the floor in DT are saying - "we can do a better job if we have the post-award people in here".

Interview #13

Functional Manager, Project Matrix

1) The distinction between the functional manager and the program manager (P.M.) is blurred quite a bit, as far as responsibilities go. When you look at the responsibilities of a P.M., I feel I operate in that area probably as much as I do in the functional area. Because of the team integrated approach, it's very hard to isolate what we're trying to do. You don't direct the functional organization without looking at the entire weapon system and the objective of what we're trying to achieve. When I get involved in functional direction, it's not like it was with my previous job, with green eyeshades - like this is what we're going to do with this contracting action - it's more of a corporate look. And as we start to achieve success, I would expect the Integrated Product Team (IPT) leads, the program managers, when they give direction, to be looking at what the functional problems might be. Sound confusing? Let me give you a quick and dirty on how we're organized. First, we have about 3 sets of organizational charts that we use. One for the personnel people, one for my functional boss and one for what's really going on. What you got here is the SBD, and what we call the front office group, the chief engineer, the 06 - deputy, and up here you got the General that runs the place. We've got 4 big product teams - an engine product team, an air vehicle product team, a support product team, and a training product team. And under each one of these, are the sub-IPTs, such as 3 here under air vehicle - they've got avionics, structures, armament, etc; support - you've got training support, etc. Rank and grade-wise, these are run by 15s and 06s. Then over here, are the functionals - contracting, financial management, engineering, and some more like security police. There's an overlay. These are called IPTs and then there's the mother of all product teams, which is the weapon system product team. We're all involved as equal partners, board of directors if you will, in running this thing. We don't cross the line of managing down, but we manage across, looking at funding and settling issues [team concept?] Right, and then we provide other functions. I've got 15 souls and although they sit down here, they are really tail-numbered out to the different IPTs - some full-time, some part-time, some do more than one, some are back in the weapon-system support. For example, two work avionics pretty much full-time, although they sit down here. And there's two reasons why they're not located out on the teams: 1) the work-load doesn't really support a full-time person (with the exception of avionics) 2) we've got 2 contracts, an airframe contract and an engine contract that really provide the contract basis of this program. And one of my responsibilities is to make sure the contract activity is done in an integrated fashion. For example, an ECP will

generally not be confined to just impacting avionics or the engine, because it's all integrated. So I look at all these as contracting tasks - I'll do the ECP and I'll have to get inputs from whatever IPTs are involved. There may be only one ECP, but there may be 3 IPTs involved.

No, that generally comes from the interface with the IPTs. Directly to the individual - they're responsible for their own workload. i.e. I've got a GS-12 (Donna) that's hooked on to air vehicle. She sits down here because she has some other work she has besides that, she attends all the meetings, and takes the daily taskings from the 15-engineer, although we get involved here with the integration of what's happening and apply a functional expertise if she needs it. If she has a tough one, she may ask a question and we may say, "well we're doing this over in engines and we're doing this over in training, so you need to try to couch your solution in this way". (You may have trouble with the direction you're going because it doesn't flop into precise boxes.) But I can say that the majority of tasking the way I define it, is not given by me, but by the IPT leader. [Performance evaluations:] It's probably the single most emotional issue and the B-2 kind of let it get out of hand. What's going to happen is that Eleanor Specter at OSD is deciding that the reason we're having some of the problems we're having in the acquisition business is because the poor abused PCO is getting isolated and beat-up by the big bad program manager, and tricked into doing things they shouldn't do. So the solution is to attach these people to the functionals to rate them. This gets back to age-old question in contracting, which is - what is the true role of the PCO. One reading is that we're supposed to be independent, autonomous, and objective of process, - a referee on the playing field. Another view is that we're supposed to be team members, supposed to help facilitate acquisition of the Air Force's requirements and in that role, we're either on the offensive line or the offensive backfield. And Specter is coming down on the other side and I don't agree with that, but she's in charge. She's saying that "you guys are going to be sure that you're objective and autonomous", etc. [Control resources:] I do, but having said that, organizationally and team-wise, we're beyond that. If I have to get into a contest with a team lead on what the contracting people are doing here, I consider that a major failure on the part of this team to get the job done. So it never comes up. I've been matrixed, programmed, teamed, IPT'd, and any form of management they can inflict on you and this one's got pluses and minuses. And the plus is if you really trust each other and have good communication (and it takes constant work) and processes like the weapon system IPT where you can sort this stuff out, you really shouldn't have to get down to who has got this and who has got that because your focus has got to be the product. If it came down to it, I own them and I'll

kill 'em if they do something they shouldn't, but it never gets to that. Yes, and that's a key word - it's a balanced approach. The exceptions you're going to find are that there are elements of financial and contracting functions that are not controlled by logic or reason, but by regulations and statute. And so, there's a little piece where I can't go beyond and these people can't get into. That's where the art of the business come in. The main players are equal, at least when things are running smoothly. When the balloon goes up, Runkel (Financial Management) and I spend a lot of time in the boss's office, along with his deputy, as sort of a senior council that he defaults to. Mostly because major program issues, especially in this environment of tight budgets, get reduced to business issues. An engineer who finds himself in a pile of dog poop will generally stay there and see the world out of a pile of dog poop and that's good. Business people, contracting and financial people are used to looking at the big picture. I don't get excited about 2 week slip and \$1.98 falling off the table. In the past, the support IPT had cognizance over the logistics function - we have just now broken that out. There will be a logistics arm - in fact there will be collocation at Sacramento and San Antonio to take up that function - we're far enough in the program to identify logistics tasks within the support activity.

2) To the extent that there's a conscious assignment, that would be the General. But the majority of my activities is just pursuing the process we have established - the review process. We have meetings where we review everything for 2-3 hours. (i.e. Award fee review boards, configuration control boards where we look at all the changes). Then I get assignments from the boss to go here, go there - to the contractor, etc.

3) It's very close as I can get to "total" - that is my objective. We had an off-sight 2-3 months ago and empowerment was one of the things everyone was all torqued-off about. And we do practice empowerment but as we do, we are beginning to find that it is a very hard concept to define when you go to lay out the boundaries of where the empowerment begins and ends at the various levels. I'm probably by nature a very trusting individual. I've worked here a long time and in several areas and I know most of the contracting assets around here at ASC and I pick the ones who I think are the best and that I trust and so there's a natural relationship here. My philosophy is to push it down to the lowest levels and my personal grade card on doing that is probably about a C+, so it needs a lot more work. We have a management team that I use as a sounding board - me, the deputy, and the two supervisors out there. They call it a team of workers from the various areas (for instance when there is a source selection, there are

contracting, config personnel, pricers etc.). And when they're finished the team should be dissolved. However, we're good at establishing the teams but were poor at disestablishing them. There are also senior level managements committees - the CCB, the ARB weapons system IPT. Only on a very exceptional basis would they not be. The key is to get the right talent on that team. But with the people I have here, I have no problems and I support them. You see decisions and the first time I may see a decision in any kind of detail might be at a review at that senior level. And the tough part is that you look at that decision and it may not be exactly what you would have done. But the best you can do is to shut your mouth and bight your tongue. Look and see if the decision was made within the decision space that should be allocated for that individual and if they hit in there, that is good. Because I've found that contracting people are like lawyers (and so are engineers) -if you put 3 of them in a room, they'll all come up with different ways of doing things, but they'll all end up in the same place in the end. And if you do step in when it's not necessary, then you have broken a trust.

4) I'll give you a two part answer - the concept is great, but its very hard to implement because the theoretical framework is populated by individuals and each individual has their own personality. I'm here to tell you that some of the people are not team players with team spirit. You have some people pulling this way and you have others who are very uncomfortable with allowing other people to do things in their names, representing the organization and you've got this micro-management view. And so, after about 4 years here, I'm tired, so my job satisfaction isn't real good right now. As far as subordinates, there's probably a mixed view. A lot of them feel good about the fact that they're involved in a lot more detailed level in the development of the product. But there is a certain amount of chaos that goes with this structure that you've got to accept. Communications are at a premium. A lot of them interpret this chaos as, and this came through at our off-sight, as senior management doesn't know what's going on or senior management doesn't care what's going on. But if you take that mirror and turn it around, that's the way it should be. Because if you're empowering your people, senior management should not know what's going on to the level of detail that the people on the teams doing the work know. And they're learning too. It's a pressure cooking, learning intensive environment. From a contracting standpoint, I used to have to turn the pedals on the bike 1 rotation to go 5 feet . Now I have to turn them 25 times to go the same distance, because everything is debated in this participatory environment. I've been doing this 25 years and I can tell these guys if they go down this path, where they want to go, that I have data on the F-16 program, on

the F-15E program, on F-117 program, all these other programs I've been on, and I know right where they're going. But instead of pulling my contracting hat on and being the usual contracting roadblock, my role now is to facilitate so that they understand where all this is coming from.

5) I'm not sure that it's effective in all environments. It doesn't do well when the system is under stress. There are times, and I can tell you right now we're at the front end of one, where budgets are going down the tubes, DOD is going to take over the acquisition mission and pull away from the services - big changes taking place, auditors coming in and putting people into jail. It's a different environment. What happens here, is you can't use the participatory approach of managing to solve all those problems. It'd be difficult to get 8,000 people in an auditorium and explain to them that we're going to lose \$500 million and ask them - where is it going to come out of, and these guys can't tell you. And so you have to get some of the senior people together with the leader and short circuit the whole thing. In a stable environment, with stable requirements and stable funding, I think it can be a very effective organization.

6) When we started, we had a 10-year development plan, a very integrated plan and the first year, it proved to be a wonderful thing, we had a way to measure everything - we actually knew where we were going. But the problem with an integrated plan is when you modify them, you have to massacre it. With the level of training and expertise we have now. If all the people were GM-14 or 15 PCOs and had 25 of experience, I would not hesitate to put one each on every one of those teams. But since the workload doesn't match up, when I'm resource scarce, I can't afford to have one person working on a team unless there's one person's worth of work there. That's the first problem. The 2nd problem, is that I've got GS-12s and Captains that are being thrown on these teams, and this is where I think some of the other organizations have made some mistakes. These are good people, intelligent people, but they get into these meetings and they are going up against maybe 5 people at the 06 or 15 level and maybe 10 people at the 05 or 14 level and maybe some majors and 13s and then at the bottom of the pile, I've got a 12. But guess what, because of the playing field we've got, I've got this individual trying to drive the bus from the back. Now, they do a good job and with the quality of people I've got, I could probably do that with them, I'm that confident in them. But it wouldn't be fair to them - why should I put them there under all that stress. We've had 2 SPO directors, Fane and Rajio, and their view is that the contracts people generally know more about the program and where the problems are, than anybody on the IPT. It's just the opposite of what you'd think, because this becomes

an integrating thing - they sit out there and they talk. And you have the princes of the realm up there, including me, who correspond by memo and they won't tell each other anything cause they're playin'. And these people down here are on all these teams so they know everything that's going on and they talk. So when the general wants to know what's going on me, he calls me to find out. So to some extent we do communications better than they do on the IPTs, and this is functional communication. Course, you've got to remember they're also on IPTs, so they attend all the staff meetings and all the review meetings - and so they get the opportunity to communicate up and down. And there's problems - a lot of problems. (If you're trying to pin down that one way is better than another, I think you're going to have problems, because this thing is situational.) After doing this for a while, I can tell you what you'd need to do in order to put these people on teams and it probably would be very effective. I've been down the hill to my matrix guys down there 3 or 4 times and they throw me out every time. Two things - they need more training and they need higher grades, so they can match up with these people.

Interview #14

Functional Leader, Functional Matrix

1) The team leader's responsibility is for the overall integration of our products and team. He is responsible for all the products and resources of the team, schedule, money, and everything. As the functional manager we support him in various functional areas: Contracting, engineering, logistics, we have to service all of these little projects in the teams' areas. The resources are controlled, that's a strange thing, they are controlled outside the team at the directorate level of the functional organization. I work for the functional area, but I am assigned to the team. There is a function leader in each area of the project. - Train, organize and equip should be the modus operandi, so if I have a problem I go to the function leader here. [Performance evaluations:] The function leader. So it's pretty balanced right. - That's the team leader. - It's a functional, I do that. - The team leader I would say. Fortunately my boss now works with the director of the program. I can go into his office and have engineering views up front past the team leader. We have a lot of inexperienced people and I don't think we have any level 2 managers. Not that they're incompetent, it's just that they don't have a lot of experience. I go to my functional boss if there are any problems, since he can go to the top, to get our foot in the front door. If I see something I don't like I stick a stick in their spokes. Everybody thinks of me that way. I've been around here too long to see things, if I don't like it I raise a flag. (Laugh) - Yes. The team leader has only been here about 2 weeks and the person he replaced had a lot of influence. If he needed help he'd call you. He liked to micro-manage things. It was really a personality thing, how it's going to shake-out I don't really know.

2) The team leader. We get very few taskings from the functional which is probably different from any other functionals. I know that there has been complaints from other areas because they get tasked from all other sorts of directions. We don't do that. There's a reason for it. We're set up differently, we have a separate organization called system engineering that do get tasked because they are not part of the teams. They service all of the engineering areas. We draw on them a lot for support, but they are not part of the teams so to speak. They work directly for the functional so that's why we don't get a lot dumped on us because they dump over there. It's really I guess trying to be done at the team level. However, this empowerment bit, it's a nice word, but it's the guy in the front office. That's where the power structure lays. If he says something the team leaders jump, that's where the

strings are pulled. So you have a certain amount of power but you got to understand where that is, and where it ends.

3) I guess we can it's pretty restricted really. We can make recommendations but it has to be approved at team level. Just functional areas, I have pretty good latitude in that area. Pretty much, there's only 4 of us and it's pretty easy to come to a consensus. We cover so many areas, that everyone has to kept up to speed so we can cover for each other. We all have to support all the projects. I have a navigation engineer, a computer engineer, an avionics engineer, and I cover the mechanical stuff since that's my background. I had an integration armament engineer but he retired and I can not replace him try as I may so I have to try and cover that too. We just try and catch as catch can. If you go into a meeting a take good notes and work it when you get back. Sometimes, it depends on what they are, probably not. If it's something that involves the whole team then we try to get a team consensus. We have team meetings once a week, on generating awards, nominating people for awards we try and come to a team consensus on that. Those are thing that involve the entire team. If it's an engineering decision, we'll send a recommendation up to the team leader and he'll decide whether or not he wants to buy it. Sometimes I think we fragment ourselves too much when we try to integrate on so much.

4) I can just speak for the guys that work for me and myself, I think we lack a lot in experienced leadership - it reflects pretty poorly. Most of the guys who work for me got at least 10 years; I've got one Lt. that is pretty sharp. They see a lot of things happening that we can see down the road will be a problem so we try to elevate those concerns, a lot of them - they fall on deaf ears. I think that makes for a little unhappiness. I think that engineering as a whole is quite dissatisfied with the way it's going. Inabilities to be taken seriously. I think that speaks for all of engineering, including the systems engineers. [Superiors:] That's hard to say. I think the functional chief, he gets frustrated too. Now that he's been moved up to the front office he's got a leg in the door and can make his concerns known. We've made a few changes as a result of that. I'm not sure how the team leader feels, he's pretty new. Procurement functions are still a pretty strange bird to him. He does get his chain pulled a lot by the front office. I think I'm starting to see some levels of frustration there too.

5) I don't even know what it is. I'll be truthful with you, I don't see what it is. I don't see how it could be effective. That's what I think is one of the peoples concerns, the big buzz word is teams and I don't think anybody in the Air Force knows what it is or has the

foggiest idea on how to go about it. Everyone is organized a different way, look at us we can't understand it, and neither can our contractor. That's the way management wants it so that's how we write it up. I really think it's a waste of resources in a lot of respects.

6) They showed me an organization chart once and said you're on this team, and this team and this team, on and on. That's stupid. You have 4 of the same people all on the same teams. What you've got is 1 team with 4 projects. Lets face it guys - but they don't see it that way. Teaming is the way to go, so that's how they are going to do it. I see it as a waste of resources. It doesn't seem to make a whole lot of sense to break it down into a micro-level like they made us do.

Interview #15

Director, Project Matrix

1) I guess I wear the team hat. The way I look at it is I have 3 supervisors who work for me that are kind of dual-hatted. One hat is that they're in charge of a section and doing all the requisite requirements that a section chief does towards administrative matters, productivity type matters, work-load leveling type matters. Then they also have on their technical hat, where in their field of expertise, they wear that hat and work as an expert in that area. So I have a procurement expert (P), a technical expert (S) and an expert in inventory management (O). If somebody is in one section and their section chief is not of the discipline they work in, there's a clear chain or line that they can go to, to get a question resolved in that field. So that's where the matrix organization falls in, where if you looked at the organization from strictly an organizational chart, it would look like any typical organization, and then underlaid inside that is the matrix. And that also fulfills some of the requirements for signature levels and approval levels and other FAR requirements. And what's also kind unique is that the matrix extends over into other directorates. For example if I have a million dollar buy and it needs to be signed off by the director of O, and it will go up through the matrix organization into O and come back down. And then when we do the buy, it'll go through our matrix organization, through me and then to the procurement director. They just report to me. We have Q people, which I've just put under the S chain and we have OS people, the inventory accuracy people, who handle RODS and QDRs.

2) I task them with administrative type things and productivity type things. Now being that we've only been up for 4 months and we took our work with us, one of the down sides, is that I haven't been able to get the supervisors truly supervising all 3 areas. So unfortunately, I've gravitated toward the O person when there's an inventory problem, or toward the P person, when there's a procurement problem. I'd like to get away from that, but it's going to take some time, because they haven't had training in the other areas. But in the long run, I'd like to get there. Of course, you still need the expertise. I'd like to get all the functional reports to all of them so they can review all of them and understand all the problems. I guess they do have 2 bosses, and sometimes get some tasks from other areas. For instance the disposal project from over in O - all inventory managers had to work their items. So the task is generated over in O, but it filters through me and I sit down with the people and explain what has to be done. And I go over the procedures or I'll have someone from O come over and explain the procedures. Another problem is in the ADP,

the way the programs are and the distribution on forms for work products - we're almost like another section over in O and the same with P and S. And I guess you can't run all new AIMS or DPACs. So the work products are run back in the functional areas and sent over. We fall under the Deputy director of the Base. And that makes in kind of nice, because we still have to follow the functional's policies, i.e. Far policies, but we've been able to revamp a lot of procedures and do away with various forms and expedite things. And it's worked out very well. And we've found that 99% of the forms between O,S,P and Q are not needed. Now, instead of sending things back and forth, the buyers hand the PR to the technician and say how about putting a source on there for me? And the technician gets up out of the chair, finds a source, lists it on the PR and hands it back to the buyer. I have said on large buys (\$25K), "let's document everything". So they need a formal form. Or the S person can ask for it in writing. I've let the various teams decide how it works out best for them and some of the groups do it a little bit differently. Some use a generic form for like a 280, or a 360 and some just use a little yellow sticky and write "what about a source?, or is this part OK" and the technician will just open up the folder and write the answer on the trailer. For this first evaluation, they are on their old standards, because they had been on them for a year and I didn't think it was fair to change them for these first 3 months. Now, one of the action items for our Team-DT, a team selected by their peers to work out a lot of the problems, is redoing their performance appraisals. What we want to do is have somewhat similar appraisals. Right now, they range from 2 to 5 elements and that causes some concern, because its not really fair. So one of the long term ideas is to make a performance appraisal with 4 or 5 elements, with 2 or 3 of the elements focusing on what you've done for your own little team and the organization, and then a couple elements particular to their field - buying, technical, etc. So that everyone will be looking at very similar performance appraisals with elements particular to their fields. We have the section chief sign the performance appraisal, whether that person is under that same function as their section chief or not. However, the reality is, they won't be able to evaluate them that well, because of the technical peculiarities of what they do. So we've gone to a teaming type performance appraisal. The majority of the input came from the 12 who is the technical expert for that person's function (maybe 90%). Then, that technical expert and the section chief sit down and go through the areas, and then of course, there are some other intrinsic areas - like do they come to work, how professional are they?, etc. So the section chief inputs on that. When they actually give the appraisal, they'll both sit down and give it together to the employee. Of course if the technical expert is also the section chief, then there

will just be one person giving the evaluation. [Resources:] Here's what we did: we tried to identify what functions should be included in DT. I got together with people in R (DESC policy area) and we went through and listed by directorate all the functions and what they did. Then, we decided which ones we thought were a good idea to put into DT - some were very obvious, like the inventory management functions, the buying and technical functions. And then you break it down into the peculiarities of those areas - for instance, Quality - we wanted the pre-award and post-award side of Quality, but what about the test lab? That didn't make sense to break off 1/10 of the test lab or 1/10 of the distribution function or 1/10 of ESOC. So, we used a rule of thumb - is it something we could manage up here and it made sense? We made a list of all the areas that we wanted. Then, that list was passed out to all the directorates and we sat down and had a discussion as to whether to include them or not and went down one by one. We lost a couple of areas - we lost on post-awards, which P wanted to keep and we lost on the post award quality function. Q said they'd go either way, they just didn't want to be up here unless P post-award was up here. So, it was a negotiated type of thing. Now, since then, I've put a proposal together to include post-award and that's where I've got to go at 10:00, to see whether they get included or not. It's about equal. But I don't see him very much. I started about 4 months ago and after 3 months, I made an appointment to see the general - I gave him a detailed statistical - what was happening and trends report and since we've started, that's the only time I've seen him, other than regularly scheduled meetings. Now I've just been told that I'm on the SPG (Strategic Planning Group) with O, S, and P. Now I don't know about the others, but I'm not down there every day with lots of ideas. I figure if I'm goofing up they'll let me know. This was the general's idea to begin with so he has supported it tremendously, which is what you need when you're trying something new, because of the anti-newness. Now, during the planning stages, I was meeting with the general every morning and all the directors knew that. And so they were all, at least on the surface, very amicable towards making sure DT got up and running. Our ultimate goal is to improve availability, because that's the bottom line in running an ICP - if the part is on the shelf when the customer needs it, then you've done your job. So our biggest goal - to improve availability is obvious to everyone. Where I have a problem is when we start breaking that down and start putting goals or quotas on what it should be - in other words "back orders should be a certain percentage", "ALT should be a certain number of days". I'm more focused right now on continuing trends. I meet with the people monthly, go over the trends and basically what we're doing is try to improve, improve, improve. I fear if I say - for example - ALT - 2 months ago, I would have said if we get down to say

70 days ALT, that's great - that's our goal, that's where we need to be. Well right now, most buyers are in the 60s and I don't know how low we can go, so I'm reluctant to set a goal and have them meet the goal and say well, we've gotten there, cause I don't know where the goal should be. With these improved processes, I think the key right now is to try to keep improving, improving and I really don't know. I have set objectives for buyers, not that they're held accountable to it, but I've taken the last few years requirements and forecasted the number of purchase requests we're going to receive a month and divided it by the number of buyers. And said OK, this is the number of buys you should be working towards - buys getting out a week. And I don't think that's a goal, I think that's helpful for planning and organizing their work, based on throughput.

It's amazing - the bottlenecks I find in here and try to explain to them what that's causing and the disruption that's causing in the flow and the process and leveling workload. What's happening is - when people first got here, they had about 240-250 PRs per person and we've whittled that down to about a 100 per person. So what we're looking at now, is that philosophy of the small batches being more efficient. I see it - the people who can get out that 20 to 25 a week, their workload has come down, their ALT has come down and it's just a matter of maintaining. Now what I think is interesting is that I've got people who tell me we don't have enough work. And I say to them, OK, let's see my number of PRs on hand, let's see yours. Now let's see the number of overage.

3) I think they're given a lot of latitude in some areas - as far as the work processes themselves, I give them 100% latitude. We have a document called DToid (DT operational improvement document) - we wanted to get away from the colloquial suggestion program and TQIs because a lot of people have a bad taste in their mouth. And we've received about 20 of them to date which I think is pretty good. Any process they want to change, they can submit a DToid, I'll review them and get them back to them in about 2 weeks. The section chiefs look at them, and unless it's something that's completely haywire, I just implement it. Because I can always go back and say "Hey, that didn't work", but at least we tried it, and then change it back to the other way. So I think the thing is - to implement them. And then what we do is have a little ceremony and I give them a letter and everybody claps. And then also, our Team-DT is going to have a lot of input on doing a lot of the big things - like modular furniture. Here's a list of their taskings. Oh yeah - and anyway, on those DToids, what happened was, we had team training and it came out that they wanted more input from the floor on these ideas. So now when I get them, I turn them over to Team-DT, to get their thing. But they're tasked with improving communications within DT and

other directorates, some of the ADP problems, having an alternate, developing concrete goals and objectives, developing equitable NIN ranges, developing new performance standards, designing and assisting in modular furniture, and strengthening their training program. And those things are going to take time and we'll just work on them one at a time. - The three of them get together and try to solve the problems, and if they can't, they go to their section chief or the technical expert who can answer the question. They're a team within themselves. What's amazing is that 95 - 99% of the decisions are left in tact. Because prior to this way of doing things, if a buyer couldn't get an answer from - say - S, the buyer would have to elevate it to the section chief, who would elevate it to the branch chief etc.. And now, we've circumvented all that. With the peer pressure of being in the group and saying "Hey, I really need an answer to this", it usually stays within the group. I've yet - well a couple instances, but for the most part, the team wants to do well and tries to help each other. And I think that having the supervisor mixed up, they're not so apt to run to a supervisor with a problem. They're almost left on their own, which I think is good - you don't have a lot of interference or micro-management. They just sort of go manage their NIN ranges - and they know what it takes.

4) Some are ecstatic, some are lukewarm and some are cold - and I think you're going to find that anywhere. But I'm going to make a bold statement and say that I think the majority of the people are happy. I think it's neat - I find that coming to work is fun, I'm challenged, I'm getting the support I need. I'm getting to learn a lot of the detailed and minor things that a lot of people never see, are never exposed to. And I think, even if we never go to this cell concept, or whatever we do, just being able to focus on this process and seeing it from it's conception to it's completion and seeing the bottle necks and the problems - and we've resolved a lot of them that other directorates aren't even aware of. What amazes me is that at times, a problem will arise in here and I've seen this happen 4 or 5 times, we'll get together with the 3 sections chiefs or 2 sections chiefs - whoever is required to solve the problem and we resolve the problem and move on. A week later or 10 days later, I occasionally hear about a similar problem from other directorates and they're yelling at each other instead of working it out - like "you did this, you need to get that, look what you did to us here", etc.. Whereas, we just resolved it and moved on - because we generated the problem, only on a smaller scale, we resolved it and moved on to something else, instead of pointing fingers.

5) I think we're suffering from some of the same problems, almost textbook problems that you find with the matrix organization. You have your first level supervisors

confused - who are they in charge of, what are they in charge of, and not feeling comfortable with it. I don't know how I'm going to fix that. They want to move back to the old way - they want to have their functional people directly under their supervision. Now, what they propose to me is that they'll still manage them, but they'll still be seated together. But I'm leery of that, because I think that will start the old fife-doms back, the old empires - and the old "I'm an IM, I'm a buyer, I'm a technician. Whereas now, nobody really cares - its just what is that team doing. But I'm getting a lot of that - just exactly what you'd expect in a matrix organization. The people really like it and the direct line supervisors are confused, don't buy into it, are leery of it, and uncomfortable with it. They've been successful coming up in the stovepipe organization - "I've become a 12 because I'm an expert buyer" - well that's good I want them to be expert buyers and I want them to manage other people too. And I don't know how I'm going to fight it, but somehow, I've got to fight it. I told them just to cool out for about 2 - 3 more months, and see where they're at. And the other thing I've told them about is I'm not real happy with the efforts they've made toward learning some of the other's people's job. Like the technician-12 learning how a buyer-12 does her job or how the IM-12 does his job - they haven't gotten into the nitty-gritty. And that's what they need to do if they're going to feel comfortable managing those people. This doesn't seem to be a problem at the worker level - it's happening gradually at that level. I've seen them helping each other do their job. I've seen a GS-11 item manager happy because she did a buy. I've seen IMs help buyers do solicitations. It's going to be interesting - I'm kind of just letting it happen through osmosis and see what happens. I'm kind of afraid to start the - I think it's a tough job for one person to do - and one of the constraints is the technical background. You actually have to have a technical associate degree and to take some of the people and have them learn that technical function - I think is going to be tough. Now, the IM and the buying function - I don't think that would be as difficult.

6) Getting post-award in here. Getting modular furniture- because some of the people perceive that no one cares about them because they have the worst furniture on the base. I think the 12s buying into the matrix organization more, learning more, getting them off to education, getting them more training, send the two people who are not from procurement to the Small Purchase course, send the 2 who are not IMs to Inventory Management school. And that's something that's planned in the future, but just takes time. And that's something that - if I could do it over again and had the time, I would probably send the people ahead of time.

Interview #16

Project Director, Project Matrix

1) I'm the higher level review as far as contracting goes - so many people have warrants here, that level of review isn't hard to achieve. If there is a division level review, any expertise or experience that I have had outside here has been helpful, because the people who work here tend to have never worked anywhere else. So, they have a relatively narrow view on how to do things, their experience is kind of limited. I came in and tried to give them advise on different ways to do things, or came up with different ideas. A real good example of that is we are a high demand division, the items therefore should be very good items for long term contracts. Trying to convince them of that was almost impossible because they had a branch here that just does long term contracts; so they thought there was no reason for us to do them. I've changed their minds on that. I do assume some roles in the supply functions, depending on who my boss of the month is, I've had 3 in the past year. My current boss is a real overachiever and grasps onto projects and runs with them without ever really discussing them. For a while I had to get very involved in supply functions and learn fast, but we've worked that out. Also since I'm a civilian and he's military, I have all the personnel type duties since he's not here long enough to learn all the intricacies, they know how it basically works. I supervise the 2 branch chiefs and try to control the secretary stuff. From an evaluation point of view all 1102's have to have 2 levels of signatures by 1102's: that worked out well here since both branch chiefs are 1102's and I'm an 1102. [My interaction is] through the branch chiefs. Sometimes I forget, and the branch chiefs are real busy I go out there and assign duties, or when you need a real quick response so I just go out to the teams. Under normal working conditions I should go through the branch chiefs but sometimes I don't. It's about half and half. I think the reason mostly is the short suspense. By the time you give it to the branch chief, and they go out and give it to the teams, it's just a lot easier to give it directly to the teams. It depends on the type of information I'm looking for, if it's something of a functional nature I'll always go through the branch chief, but if it's something like they need a volunteer for a team at the directorate level I just call up each team leader. That way you're not going through levels just to get a simple answer. When they first envisioned this organization, what they really wanted was not to have branches. They really did intend to flatten the organization, the team leader would have then been supervisors but apparently the general felt that might have been a little too radical. He wanted the structure the same as it is now. What we have found out is the span of control

is just way to big for the branch chiefs, there is just too much for them to do.

2) They wanted us to set up specific measures to show how effective this organization is. We never took the time to do it, consequently we get measured by the same goals as all the other organizations which probably isn't bad. I don't know if that was through the Hawthorne effect, but we have been able to keep our measures lower than everyone else. - The branch chiefs do. Let me tell you it was ugly this year, just ugly. Last year we really didn't do any, there was only about 12 people, and the division chief did them all, and there was a lot of concern that if the branch chiefs are not functionally aware, "how can they evaluate us?" One branch chief is very affiliated and asks for input, the team leaders are very involved. The other branch chief is more authoritarian, wanting to do thing by themselves asking for input but probably not paying much attention to it. This too shall pass, it can't get worse. The directorate has control. When they originally put the organization together, they worked with base load figures. How they came up with them, I don't know. What I'm seeing is that it was just a W.A.G. Team B has such a heavy workload, that team could have had twice as many people, so we ended up just shifting work because I couldn't shift the teams around. Nobody really has power over the organization, basically we answer to directorate here but even though we are under supply, we really answer to procurement. They give us our warrants and oversight. I really don't have a problem working with either of them. I wish I could delegate the personnel stuff to the branch chiefs, but they are so busy I just try and handle that. I go to both the P and O staff meetings so I tend to get bogged down. What we did as far as workload goes is we sat down with the branch chiefs and team leaders and brain-stormed and tried to come up with some duties. One of the things I wanted the branch chief to do was have some sort of control of the workload. I felt they needed to know what was happening out on the teams, the team leaders did not like that. They said "no that's our duty, you're taking that away from us". Even now, I have an idea that some teams are working a lot harder than others from my perspective. The truth is the only people who have been really forgotten are the equipment specialist, because we just don't have a handle with what they do. We haven't had any problems so we assume everything is ok. The branch chiefs really do both procurement and item management reviews.

3) As far as I'm concerned, they have more latitude than I do. They only answer to me, we really give them a free reign. That's worked out ok. They really have the authority to make the decisions they have to make. [Team

Leaders:] I think I can answer that. I know only because I think I know my branch chiefs. I think that all could have a lot of latitude. They have as much authority as they can take and keep and I believe that is true. I know that one branch chief holds regular meetings to keep abreast of what's going on. We have tried to do that [use committees] to the greatest extent possible since we've been here we've had PATs or even if we don't call it a PAT, an informal team to discuss it and come up with a consensus. I can honestly say since I've been here I really can't remember anything where we've made a unilaterally dictated decision. We try to get, at from the team leader level, involved and tell them this is what we want and go out and talk to their teams so that here is a consensus - to the greatest extent we can. Usually we have a staff meeting with the branch chiefs and teams leaders to discuss an issue. If there is a special project, like an awards team, we just ask the teams for volunteers to get a cross section so that everyone is represented. Sometimes they're formal, sometimes informal.

4) In the past few weeks, it hasn't been too good. I think that it has been very high, whenever people come in to talk to our employees, at least the feedback I get is that the people really like being here. They're excited about being part of the whole process. I think it's real high. One of the things they're talking about in the reorganization is breaking us up, and from a management point of view I understand, though I disagree with the action. Our people are really unhappy. They feel like they have worked really hard, and they have. They started out with a big backlog of work, they took work off the floor when they started this organization and cleaned up a lot of messes. They feel they've worked hard to achieve some savings, and reached some goals, and now they feel that's being taken away from them. So they're not real happy about that at all. There's so much more we could be doing. The branch chiefs I think are happy, but they feel there is too much workload. We saw in the evaluations that this just wasn't working out and we said we really need to make the team leaders the supervisors. We were told no, that we couldn't do that, though I feel it would have been very easy to do. I have heard since that they have changed their minds. Am I satisfied Yea, I just feel frustrated. I feel there is a lot of work to do, that's not getting done. I'm not quite sure what it is. We have so much of everyday work to do that we haven't had the opportunity to fine tune the organization like it needs to be. That has been a frustration. One of the things was to develop goals and measures and over the year it hasn't been done. Our workload is so different, one mistake they made was making this a high demand division, because we have a lot of the problems. Whenever there is a review or briefing, half of them are always ours. There's going to be a Headquarters

briefing in July, and of the 20 NSNs, 17 are our's. We have so many high demand items, that the workload is just unreal. I do, at least the team concept is very effective. There are some changes we've made for expediency. For instance when you loose clerical support, we've found that what we've had to do was have our clerical support managed from the branch level. System constraints are a problem, because the system kicks out the buys and the item managers really don't have the authority to change that or they're not in compliance, until some of the systems change. This is not an overnight thing, it takes years to work out.

5) One of the advantages is being part of the whole process. It's real important to see the whole process, for people to see each part and where they fit in the organization. They understand that what they do is important, to the whole. I believe that this organization has become more familiar with the items that they are dealing with. One of the things we try is for the equipment specialist to obtain a picture of the end item for everyone to see what they're working on. I feel procurement should be a part of item management. After all we are here to support the item manager in getting the part to the user. After all, our mission is to support the item in the field. One of the disadvantages is who you report to, I have 3 bosses myself. One is the director, another is regulations from the procurement side of view, and the supply side. I just deal with it.

6) I think we need to have to have an opportunity for some really good training. We need to take whole groups of people out to do team building. I've read both "The Goal", that was ok, and "Zapp", I loved it. I wanted to go out and buy all my team leaders a copy and tell them to read it. I want them to get it because they have never been supervisors. I don't want them to fall into the old trap where they say "I'm the supervisor and you have to do what I say because I'm the boss". They need to find a way to truly empower their people.

Interview #17

Functional Chief, Project Matrix

1) I guess that's because there are 2 managers involved because of our structure. The functionals interface with the mother organization, the logistics or engineering organizations, the contracts. There is still a deputy program manager for logistics as a functional title. The individual team functionals are responsible not only to the functional management but also to the project managers for providing a cost effective and maintainable system. For the product they go through project management, for personnel and process it's through the functional management. It's an amalgam of both. The tasks for example, the project tasks are assigned and are put together by the directors with hooks if you will to connect to the functional workers and requirements. If I have to do such and such accomplishment by this event then that will require me to interface with the group to accomplish that event. That hook will say - interface with those functional people. If we don't have these hooks, which are contractually implemented link us to the other areas during the development program. Under the concept of teaming here, I am responsible for those, I provide the initial input which then goes up to functional director who does the rack-and-stack. I take the inputs from the product team leaders almost totally. I wouldn't do it without them. Their inputs are what goes into the performance rating. They can't do them themselves, it must come through the functional line. It's formally handled through a checklist I use, because I feel that's my job. It's formally evolving throughout the organization. I've done most of that myself, but it's evolving.

2) All I have to do is ask the home functional organization, and they get someone. I only do that because I feel I should follow the chain of command, some others do it differently. Once the individual is identified, I interview them and decide if they are suitable for our teams. I sit down with the team and say "here are your folks - what are we doing? Have we met our management plans", and every month we have an overall team review. We go through every WBS to determine every variance and their impacts.

3) I think the only way to operated in a team is with latitude. I totally endorse the concurrent development leadership model which identifies that decision making should be done with the workers at the lowest possible level. They are the folks that deal with the issues every day, know the issues, that have the data to make discrete choices. The only thing we provide in management, is the people the process and resources to do their job, and then allow them to do it. I prescribe totally to this

philosophy. The real issue is to find the personnel who can live in that environment. A lot of folks don't transplant well into a teamed environment. We have to be very vigilant because that can really disrupt a team. - Absolutely, for example on every thursday the teams all get together and go through a series of what is happening during project development, and the impact it has on functional areas. Yes, there is total involvement, the best I've ever seen. It's an open flow of communication that surprises me, I'm very surprised. The committee is established through a charter given by the project lead team and the functional team. Again, here's the structure, when a decision is made we follow this structure. - Absolutely, my responsibility to the functional organization is to ensure that the process is followed, that there is budget for it, that there is a start and end date and it reaches some kind of conclusion in the master plan. Which means it contributes to the goals of the organization, that there is money. At the monthly program reviews, if a decision is pushed up to our level, the first thing asked by the project leaders is if there is budget for it. If I say no, he'll want to know how much and why not, and I'll have to have the answers. If I don't have the answers, my credibility is gone, I may as well look for another job.

I provide a focus for my subordinates. In the case of support equipment, I want less. I want to know what you are doing to make sure the support equipment use by the contractor in test, assembly and manufacture is the same piece of support equipment we are going to use in the field. So I have only one piece of support equipment that performs all 4 functions. They make the decision, but if I come in and say what's your tool count, and I pick out a tool and I track back I want to see that same tool in the other 3 applications or know why they can't be. I do it indirectly by giving a budget to their area of 'X' now how they spend it is up to them, spend it wisely, because every month I get a report on their variance. I over-turn decisions by convincing the folks that the strategy that they have filtered their decision through, of identifying a problem and working through it has a fault to it, having them recognize their faults, and their thinking and correct the way they are looking at the problem - not me direct the correction. I want them to say they'll correct it. If I see something we have a meeting and make sure a scrub is done and the teams words are the ones they have agreed to. When they came in I asked about their strategy and I didn't think some of the identified actions were strategically correct. They had to be ready to justify them to me as necessary.

5) Totally. I like the way the organization's structured. I feel I fit into it well. I've got good representation from a functional point of view, my opinions are considered

and I don't have any problems. The problem I do have with this structure is that I question the fairness of the personnel system. The personnel system is very antiquated, it doesn't take into account teams too well and folks who deserve recognition and promotion, it's tough because the functional home office doesn't always know what's really going on here. They just don't know. They know they have a body here, what they see is just a performance appraisal for a counter signature. If they don't know, they why would they care? - Yes in terms of project, getting the job done. Having the flexibility to do the job, yes totally. I think we don't have anyone here that didn't transplant well into the team. Functional leaders are even going through a change in that area, are getting impacted through I.W.S.M. approach so their influence is changing drastically. There is a lot of trepidation concerning how are they going to get promoted, and how do I ensure they are getting the training that they need, because of the removal of the functional managers from the persons on the team. That's the biggest bridge we have to build to cross the chasm from the functional organization structure, and the teaming structure. The functionals are caught between the proverbial rock and hard place, between the personnel system and the realities of the teamed organization. I don't know how they juggle the balls, sometimes I feel they juggle the balls differently than I would. I don't like it when I can't help my folks. When somebody comes in for counseling, what can I tell them, what in heaven name can I tell them in a team structure.? I think I can sum it up very quickly. During the re-phase proposal, to adjust the program, we have to have the money available. In January we set up a schedule saying here is the lead team schedule of events we worked the proposal as a team, we get the proposal in, we evaluate the proposal, we price the proposal, we do all the negotiation and contracting. We are holding to that schedule. The General said that these teams are the best part of the organization, lets let the schedule speak for itself so I think that we're doing a very good job even though it's a lot of work. I think it helps that we have congenial entity here. There is a lot you can do when you are separated by buildings, but where are the tentacles that attack you as part of the team. We have a structure that is working well. A lot has to do with personalities. The trouble we have is reaching outside our organization and getting those who interface with us to understand all the aspects of the job the way that we can as a teamed structure. Sometimes the difference in structure causes us some difficulties. If I could change anything, it would be to do a better job of letting others understand our structure.

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